



1932 - 2007
CELEBRATING 75 YEARS

ECHO IRELAND

Journal of the
Irish Radio Transmitters Society
September/October 2007

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EI75IRTS, the headquarters station of the Irish Radio Transmitters Society which operated from the Phoenix Park during the CQIR Contest at the end of September.

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The views expressed in Echo Ireland do not necessarily represent the views of the Society or the Editor

**Deadline for next issue
November 25th**

CQ-IR Draw

The draw for the prizes in the CQ-IR contest will be made on Saturday December 8th at 1300 in the Comfort Inn in Portlaoise.

This is a public draw and anyone interested is invited to attend.

Successful outcome of meetings with ComReg. See page 4.

5MHZ Available to EI Experimenters

Agreement on 5 MHz beacon

70MHz on general release

Power levels to be looked at

Plus more.....

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News Bulletins and Readers

Sunday			
Dublin	1100	7.043	SSB
Wicklow	1130	3.680	SSB (as Gaeilge)
Dublin	1145	145.525	FM
Dublin	1200	3.650	SSB
Tipperary	2030	145.450	FM
Dublin	2130	145.525	FM
Monday			
Cork	2000	145.750	FM
Limerick	2000	145.725	FM
Louth	2000	145.675	
Galway	2000	145.625	
Tuesday			
Waterford	2130	145.650	FM

Colm EI3H, Sean EI7CD, Gerry EI8CC
Paddy EI7GK, Danny EI6GS
As 1100
Tommy EI7IT, John EI2JB, Andy EI5JF
As 1145

Con EI7DJB, Vincent EI7HN
Brian EI9AL, Tony EI2AW
Peter EI4HX, Thos EI2JD
Aengus EI4ABB, Richard EI5GC

Gareth EI7FZB, Robbie EI8FZB

EI75IRTS Logs

Users of the special Society Jubilee callsign EI75IRTS are requested to submit the log of their activity to the QSL Manager, Denis, EI6HB immediately

There are a lot of direct QSL cards after arriving and QSO details must be checked before confirmation is sent out.

Logs in ADIF format, preferably, should be sent to *ei6hb@eircom.net*

Wanted

The Society is currently seeking volunteers for the following jobs:

- **Editor for Echo Ireland**
- **HF Newsreaders**
- **2m Newsreaders in the Dublin area.**

If you would like to get involved in the society's work, please contact any committee member

IRTS Committee

Next Meeting

December 8th 2007
Comfort Inn Hotel,
Portlaoise
1100

Volunteers Wanted

The Society is looking for a new editor for Echo Ireland. If you are interested, please contact any committee member.

Volunteers are needed for the radio news service. There is an immediate need for additional newsreaders to become part of a rota for the Sunday 2 metre news broadcasts from Dublin. Also required are people to join a rota for the HF news broadcasts on Sunday mornings. These can obviously be located anywhere. Again, contact any committee member.



Silent Key Billy Cantwell EI7GO

The many friends of Billy EI7GO will be saddened to hear of his death. Billy had been ill for a relatively short period and died peacefully at his home in Mullinahone on Monday August 27th 2007.

Billy was one of the most regular callers into the weekly HF news bulletins and prided himself on being mostly the first to be heard on the 80-metre news call in.

Billy was an active member of the Tipperary Amateur Radio Group and participated regularly in various HF and VHF nets. He was extremely popular with all with whom he came in contact. Billy was blessed with an infectious good humour and a ready wit, which we all enjoyed.

The experimenter Community was well represented both at the removal on Tuesday evening and at the funeral Mass on Wednesday.

The 'voice of downtown Mullinahone' as Billy humourously described himself is now silent and will be sadly missed by us all.

To his wife Stella, his son Liam and to his daughters Anne, Noelle, Ailish and Michelle we extend our sincerest sympathy.
May he rest in peace.

Silent Key EI9HY

We are sorry to have to hsr to report on the death of Brian Lynch EI9HY. Brian died in September after a short illness.

To his wife Eileen and to his three daughters we extend our deepest sympathy.
May he rest in peace.

New IRTS EMC Manager - Brendan Minish EI6IZ An Introduction

The purpose of this short article is to introduce myself.
I have recently been appointed as the EMC Manager for the IRTS.

The national society works in co-operation with other national societies in EMC matters; the combined efforts of a number of national societies will sometimes be able to achieve progress, individuals or individual societies would not.



Brendan EI6IZ
Operating EI100MFT at Clifden

As I see the job, it entails offering:

- (a) advice on how to locate and deal with interference to radio from other sources
- (b) advice on how to solve compatibility problems from radio to other equipment and services
- (c) keeping up-to-date with regulatory matters relating to EMC matters especially those of interest to radio amateurs.

I believe that most EMC issues can be resolved, and that in many cases the cure, is not complex or difficult to implement.

I encourage members with EMC issues to get in touch with me by e-mail (preferred method) ei6iz.Brendan@gmail.com or by phone 086-2501832.

I'd also request if there are any EMC topics that members would like to see covered in future editions of Echo Ireland, that you please let me know.

For those with a deeper interest in EMC issues, both The RSGB Guide to EMC and the ARRL RFI Book are available from the IRTS bookshop, and are well worth reading. On the web, there's the RSGB EMC pages at: <http://www.rsgb.org/emc/> and the ARRL

Finally, I'd like to thank my predecessors who did much good work on behalf of the society and its members.

Brendan Minish, EI6IZ.

Attention DXers IRC's available

As a result of the recent AFRI 75 DXpedition to Swaziland the QSL Manager Peter EI7CC has a number of International Reply Coupons which are being offered for sale to IRTS members.

The IRCs (which have an expiry date of 31/12/2009) are available on a first come first served basis at 10 IRCs for €10 pro rata.

If interested please contact Peter EI7CC by email at ei7cc@oceanfree.net or by phone at 01-2852060 to reserve the number required.

Members are reminded that surplus funds from the direct QSLs are being used to assist Swaziland Scouting's 'Thirst For Life Project', details of which can be found on the IRTS website.

Meeting with ComReg

5MHz Frequencies granted to EI Experimenters

Following extensive contact with the military authorities by the Society it has now been agreed with the military and ComReg that for an initial period of a year four 3 kHz channels will be allocated to experimenters on a secondary and non interference basis. Individual applications will have to be made for permission to operate on these channels. The 3 kHz channels are centred on 5280, 5290 5400 and 5405 kHz.

The power limit will be 23 dBW (200 watts) to an antenna with not more than 0 dBd gain (e.g. a dipole). The permitted modes will be CW, USB and digital Modes. The USB carrier frequency will be 1.5 kHz on the low frequency side of the channel centre frequencies. Some or all of these channels are also in use in the UK, Iceland, Finland, Norway, Canada and the USA. It should be noted that three beacon stations in the UK operate on the 5290 kHz channel for three minutes in every fifteen minutes. These stations are GB3RAL, GB3WES and GB3ORK. Care should be taken to avoid any interference with these propagation beacons.

5MHz Beacon

Still on 5 MHz, ComReg agreed to consider favourably an application by the Society for a 5 MHz beacon. An application was submitted after the meeting and the indications are that this will be granted in the near future.

70 MHz

It has been agreed that as soon as the necessary documentation is amended by ComReg the secondary allocation at 70 MHz will be made generally available to existing and new licensees without the need for a special application in each case.

Repeater Callsigns

It had been signalled some time back that ComReg wished to reorganise the allocation of call signs for repeaters. At that time a system was proposed by John Mc Carthy EI8JA and was publicised on the repeater Reflector. This system has been accepted by ComReg. Voice repeater call signs will for the future have the prefix EI2, EI7 or EI0 (probably) depending on whether a two metre, seventy centimetre or ten metre repeater is involved. The call sign suffix will have three letters. The first two letters can be user determined information such as ML for Mount Leinster and a final letter R denoting a repeater. ComReg have indicated that the figures 4 and 6 will be used for four and six metre repeaters when any such are licensed and that the figures 1,8 and 9 will be used for Beacons and TV repeaters respectively.

Repeater groups and Clubs which operate repeaters were informed of the new arrangements via the Repeater Reflector or by letter and proposals for call signs are to be submitted to ComReg by 1 October.

Even if a repeater call sign complies with the revised arrangements notification of intention to retain the existing call sign should be submitted to ComReg to avoid the possibility of duplication.

10GHz Allocation to unlicensed SRD's

The notification which IRTS received from ComReg about the proposal to open the segment 10.4 to 10.42 GHz to unlicensed Short Range Devices mainly for movement detection in the context of traffic control was discussed.

In accordance with an undertaking given at the meeting this matter was publicised via the radio news bulletins of 16 and 23 September and any experimenter having concerns about the proposal was advised to contact Jim Connolly of ComReg. The relevant ComReg document is 07/37 and is available in the publications section of the ComReg website at www.comreg.ie

Power Levels Review

The question of increase power levels for experimenter stations was also discussed at the meeting and it was agreed that the Society could submit an application to ComReg in this regard. The necessary data for this is being collected at present.

Call Sign Database

New arrangements have been put in place so that the Society can be kept informed of the issue or cancellation of call signs.

CEPT Licence Problems for US Amateurs

Due to errors in the documentation submitted by the FCC to CEPT there was some difficulty with regard to certain US licences being accepted as CEPT equivalents.

Arising from the meeting this matter has now been clarified through the efforts of ComReg and the Society.

The position now is that Technician, General, Extra and the old Advanced classes of US licences are now accepted as CEPT equivalents and holders of them can operate here for up to three months, subject to the local ComReg regulations.

Lapsed Callsigns

On the question of call signs it was clarified that a call sign can be held without payment of fee where licensees notify ComReg of their intention to be away for some period of time but would intend to re-activate the licence at a later date.

As was already the position, the callsigns of silent keys will not be re-issued without the permission of the next of kin.

At present, lapsed calls are only being re-issued where there were good reasons for the holder ignoring reminders and not paying the annual licence fee. The Society intend pursuing this matter further with ComReg.

This issue will of course no longer be a problem with the introduction of the proposed lifetime licence.

It was established at the meeting that the lifetime licence is awaiting general regulatory changes in relation to licensing generally.

No definite timeframe is available on this at present.

The Society would like to thank the ComReg officials for their positive approach to this meeting which enabled a number of issues of concern to the Society to be brought to a satisfactory conclusion.



Kay WA0WOF operating at EI7M while a cruise ship stopover in Cobh.

Galway Radio Experimenters Club

The Galway Radio Experimenters Club (GREC) held its Annual General Meeting in the Menlo Park Hotel on Tuesday last the 11th Sept 2007.

The agenda for the night was to discuss the upcoming Marconi field day which is of course the 100th anniversary of the first commercial radio link between Europe and the United States, Club issues and to elect a new committee.

The new committee members are as follows:-

Chairman: Tom Frawley EI3ER

Treasurer: Damian Commings EI2HG

Secretary: Adrian Jackson EI7DMB

Two ordinary committee members were also elected and these were Larry McGriskin EI9CN and Tom McNamara EI8DD.

It is the aim of the club to run classes in the new year and to participate in most if not all of the upcoming field days and events.

There was an excellent turn out for the meeting and the committee would like to thank the 24 members who took time out to attend.

See report on the Marconi celebrations on page 24.



Pat EI3HX and Peter EI4HX manning the IRTS stand at the Cork Rally

Limerick Radio Club

International Lighthouse Weekend

Members of Limerick Radio Club took part in the recent International Lighthouse Weekend from Tarbert Island Lighthouse No. IRE 073. Two stations were in operation over the weekend and more than 300 contacts were made.

Those taking part included Dermot 2GT, Tony 2AW, Mike 2IX, John 6IW, Simon 7ALB and Alan 8EM.

Those requiring a QSL card should contact the Alan EI8EM QSL Manager.

Two Meter Repeater

The club wishes to advise repeater users that a new antenna has been installed on the 2 meter voice repeater.

It is a Procom CXL2-3C 3Db gain, vertically polarised omnidirectional antenna. The club would appreciate signal reports from users. These can be sent to ei4lrc@eircom.net.



Mark EI6JK operating EI75IRTS at the Phoenix Park

80m Counties Contest
Tuesday January 1st 2008
1200 - 1500utc



Enjoying the Cork Rally in Blarney were Judith KA5PQD, Barry W5GN, Al AL7GQ and Tim EI5GPB



HF Happenings

with Dave Deane EI9FBB

It's that time again, and apologies in advance for this being a slightly shorter account than usual, but being written just a few hours before publication deadline, the more important and unusual reports have been picked out. It has now been 26 consecutive days with having zero sunspots and with one fast tune of any chosen band, it is clear to assume that we are now at the absolute bottom of Cycle 23. Even still, there have been some nice happenings and events with some nice DX being caught by the deserving. On to the DX news for now.

3B7C - St.Brandon & Agalega.

Starting off with probably the DXpedition highlight of the year for many, saw the 3B7C team in action from the 7th to 24th September. This major multi-national team including our own EI5DI broke several new records and logged some 137,500 QSO's. Anyone who participated in the fun in chasing the team on as many different band/mode slots saw exactly how even moderate stations can work DX. It's obvious that the team were hearing very well and did pay attention to this 'forgotten' extreme westerly part of Europe as I personally worked them with ease sometimes hearing them at only S 0-1 on my S meter!!! With 33,760 unique callsigns in the log and with 88 different EI callsigns listed as follows, it's a big congratulations to yet another successful operation by the team. A special report can be found elsewhere in this issue written by Paul, EI5DI with thanks. There is a table elsewhere in this issue showing the callsign and number of band/mode slots.

3C7Y - Equatorial Guinea.

Another unusual African one that was aired lately was the previously mentioned 3C7Y operation. From 5th to 14th October saw this relatively small team of EA5BYP, KH7Y, EA5YN & EA5BRE operated from Bioko Island AF-010. Running high power stations good signals were heard and the following EI callsigns made it into their log.

17 CW EI0CZ	17 CW EI5DR	17 CW EI9FBB
20 SSB EI2CN	15 SSB EI5GM	20 SSB EI9HX
15 SSB EI2CR	17 SSB EI6FR	17 SSB EI9JF
80 SSB EI2IU	17 SSB EI6IL	20 CW EI9JF
17 SSB EI2JD	17 CW EI6IZ	20 SSB EI9JF
17 SSB EI2JD	15 CW EI6IZ	17 CW EI9JF
17 CW EI2JD	17 SSB EI7GQ	15 SSB EI9JF
20 CW EI3IO	15 CW EI7JF	30 CW EI9JF
17 SSB EI3IO	17 SSB EI8EM	
20 SSB EI4CF	15 SSB EI9FBB	

place between November 15th and December 15th. This operation will use several calls - XF4YK, XF4YW and 6E4LM. The latter is in commemoration of the 75th anniversary of the Federacion Mexicana de Radio Experimentadores (FMRE). Team members include XE1YK, Carlos Levy (team leader); XE2YW, Eduardo Martinez; XE1VVD, Manuel Garcia; and XE3RBA, Juan Daniel Baraggia. Supporting them from the homeland will be pilot stations XE1J, Jose Levy and XE1GRR, Rafael "Tony" Gomez. The team has a Web site at www.6e4lm.xedx.org, which includes equipment, antennas, suggested frequencies, photos, on-line log search and more. QSL XF4YK via XE1YK and XF4YW via XE2YW.

T88RY - Palau.

T88RY will be the callsign for I2DMI, Frank, December 26-January 1, on Palau. He will be on all the HF bands, but RTTY only. Frank says, "Please do not ask me to try different modes." Frank calls his trip a "DX holiday." He will only be on where there's good propagation - that is bands when they are really open -- but look for him on 3582, 7037, 14082, 21082, 28082, 10139, 18102, 24922 and 50602, split up two, or 2-10, depending on the size of the pileup. On-line log, thanks to N6RT, will be on <http://dx.qsl.net/cgi-bin/logform.cgi?t88ry>. Frank says he will confirm via LoTW and e-QSL the second week of January, via bureau to everyone in March, and direct if requested. Mail to I2DMI, P.O. Box 55-22063, CANTU', Italy. Include an SAE and \$2 for return postage. Direct answers should go out starting the second week of February, after the cards are printed.

TI9K - Cocos Island.

TI9K will be the callsign for the February, 2008 operation to Isla delCoco, NA-012. Ops will be EA1DR, EA1IR, DH8WR (EA2CRX), DJ6SI, DJ7JC, DL2AWG, K5YY, TI2KAC and W4OI (HK1AR). They will have as many as four stations on the air between February 6-15, 160-10M, plus 60M and 6M, CW, SSB, RTTY and possibly PSK31. QSL via EA2CRX direct or bureau. www.ti9.eu.com. The operators embark from Playa de Panama on February fourth for the one to 1-1/2-day trip to Cocos Is-

land, and return to the mainland on February 16th. Donations are welcomed: www.ti9.eu.com/donations.html.

VK9AA - Cocos Keeling.

VK2IA (DL1VJ), Bernd, will be on Cocos-Keeling again in late November for the CQ World Wide CW DX Contest. He'll be using his VK9AA call. Look for activity from Bernd between November 19th and 26th. Joining him on this trip will be DJ8NK, Jan. He will be QRV with his newly assigned VK9CCC callsign. Activity will be on 10-160 meters on CW, SSB and RTTY. QSL VK9AA via DL8YR. QSL VL9CCC via DJ8NK.

TL8DV - Central African Rep.

W1DV, Dave, is planning to go back to Central African Republic in mid 2008. Plans are to have new antennas and a new rig for TL8DV. More on this one later.

VP8DIF - Sth. Georgia Isl.

MM0DWV, Lars, will be on from Husvik, South Georgia Island, VP8. This is an old whaling station. He will have the callsign VP8DIF for his January 27-February 28 operation on all bands. His operating schedule will depend on his work obligations. QSL via DJ9ZB direct or bureau. More info: <http://www.lars-boehme.de/vp8dif/index.html>.

The results of the GMDX Most Wanted Survey are in. This survey of 104 DXers in the United Kingdom gives a good idea of the most needed countries there. Number one is P5, North Korea. Number two, KP1, Navassa Island. Number three, Yemen, 7O. KP5, Desecheo Island and 3Y/B, Bouvet are numbers four and five. FR/G, Glorioso Island, is number six and Kermadec Island, ZL8, is number seven. JD/M, Minami Torishima; ZS8, Prince Edward and Marion, and C2, Nauru, round out the top 10 most needed. This is also a good indication for us here in EI, what with similar conditions and propagation etc.etc. as I doubt it would be possible to do a dedicated 'EI Most Wanted survey.' - (Any ideas) ???

Several DXers from Thailand reported great news for Thai Amateur Radio ops as they now have access to the 12, 17, 30, 80 and 160 meters, with no time re-

(Continued on page 7)

(Continued from page 6)

straints. The news was published in the Royal Gazette on October 11th. "An official statement from RAST is forthcoming but the law came into effect as of October 11th and the credit for this milestone goes to the special committee that has been working very hard in "stealth mode" to get this done", reports HS0ZDY, Sam. Thai ops can not operate on the following frequencies:

160 meters 1.800 - 1.825 MHz
80 meters 3.500 - 3.540
30 meters 10.100 - 10.150
17 meters 18.068 - 18.168
12 meters 24.890 - 24.990

Amateur Radio in Iraq was suspended in March 2007 due to security concerns. In August of this year all licenses issued by the Communications and Media Commission expired. New licenses are now in the works and will soon be issued says Iraq Amateur Radio Society (IARS) President YI1DZ, Diya Sayah. This includes both nationals and all visitors (YI9). Anyone interested in reading the new application form can find it at <http://www.iraqi-ars.org/applicationofamateur.pdf>.

As usual, CQWW being the highlight of the DX calendar, saw ALL the bands crowded once again during the last weekend in October. Does mother nature take pity on us DXers and generate good conditions to all 40 zones on this same weekend each and every year or is it the fact that the bands could be still open, but us as an empire are now so dependant on DX cluster spots that we don't even call CQ anymore??? I'll leave you to decide on that one as you read over the following reports, taking special attention to the higher bands. Here is my own log extract from the past period.

Running a TS-850SAT & 400w into an Antron A-99 vertical worked the following on **10M**: 5U5U, C52C, 3DA0WW, C91R, 1A3A, LU4DX, T93O, A61HH, C50C, OK1EV, 3B7C, ER4DX, EX2M & F4ECJ while **12M** netted: IS0OMH, ZS6BQI, OD5/F5PTM, 4U1WRC, VQ9LA, C91R, 5L2MS, 9U0A, TK/DL4FF, 3B7C, LY3M, 7Q7CE & LU1ECZ. **15M** logged: TT8PK, RW2F, P40PA, ZS1CT, W4RM, LA5YJ, PA0MIR, J88DR, 3C7Y, ZC4LI, A52AM, 3B7C, EX2M, M5BFL & MM0SSH and same antenna on **17M** worked: 1A4A, 7X5VRK, C52C, 5N47NDP, 3C7Y, 9U0A, ZA1E, J6/DL7AFS, 9H3X, 5H3RK, A61Q, 9N7JO,

LU7HF, TL8CK, OJ0B, V5/HB9PHJ & R1FJT. Using a 40M performance + antenna for **20M** netted: 1A4A, J6/DL7AFS, 9U0A, JW8DW, W3UR, A52AM, W2AF, 3B7C, IR2SRT, BV4FH & KH6IB. **30M** worked: TK/DL4FF, 9M2GCN, J6/DL7AFS, 3B7C, J3/DL7VOG, GJ0KYZ, ER5AL, 4O7T, LY2PX & SV5DZR while on **40M** logged: 4U1WRC, J88DR, HC8N, KH7X, V47KP, 9Y4W, 4S7BRG, C52C, 7X2LS, 5N47NDP, ZL7/DL2AH, ZL7/SP5EAQ, ZF2JO, J6/DL7AFS, 3B7C, TI4CF, VE1OTA & YK9SV. Using a dipole for **80M** worked: C31LJ, HC1HC, 1A3A, RW2F, 4U1WRC, FY5KE, HC8N, OH0B, TS6A, 8P5A, CN2FB, V26B, VY2ZM, CQ9K, 6W1RY, Z35A, CN2KT, EK8PL, JW7QIA, EY8MM, C52C, GB75PW, T77C, FM5AA, 8R1XR, OX3HI, ZB2FK, J6/DL7AFS, 5P1B, MU0GSY, HV50VR, 7J4AAL, 9H3YT, 4Z5LA, OJ0B, FP/K9MDO, V51LK & HI3TEJ.

Charlie, GI4FUE has been busy erecting a new tower and antenna and therefore did not have quite enough operating time as he hoped for. Still, his new antenna (Sommer XP-70s) seems to be working well logging these following contacts. Using this antenna and an Icom IC-756 pro logged: **10M** – EA3KU, S53EO, YT7HQ, 9A7P, T90HQ, 1A0KM, 3V1A, 4O3A, MU0FAL & IU9HQ. **15M** worked: A25SL, CQ9K, C50C, TS6A & OK1TN while **17M** netted: C52C, 8P6DR & 5L2MS. **20M** probably being his most productive band this period logged: VK3MO, 3C7Y, 5L2MS, TM5WRC, J48IO, C31CT, PJ7/EEA3GHZ, VK4WIA, P40W, VY2/KV8Q, 8R1RPN & VR2C. Using 5 elements on **6M** logged: EB3JT, CN8KD, EA8AQV, HA8QT, 3A2LF, OE6VHF, SM5FVH, HB9ZS, J79PAK, T90T, 9A2KL, S58AL, HA1ZH & OM2RC so it's nice to see activity still on 6M.

Eoin, EI9O, has again submitted his log for the past period. Using a Kenwood TS-440sat and an 80M dipole antenna logged these following **15M** contacts: 3B7C, 6W1SJ, CN8KD, 6Y1V, VE3RM, KC1XX & TA3D while **17M** logged: 3B7C, 5B4AHY, 9K2MB/AM, C52C, K6YUI, CT3JCE, EA3NU, LX1HD, OS8A, RX6LG, W6ED, YT6ML, ZD7X & ZF2BI. **20M** worked: 3B7C, 4S7HIG, 4Z5ML, 7X5VRK, 9Y4D, AN7RB, CO8LY, CN8ZG, CT6/W6NV, E20WXA, HB9CCL, HK3OZ, HR2PAC, J28JA, JW9DC, K2S, LU1ALF, LW4EU, VE1OTA, YT07SRT, ZF2DF, R450KB,

PJ4/PA3CNX, EK0B, YL7X, OX/PA3EXX & NP2/AK2P. **40M** netted: 5P9A, 6V7G, CT3/N6AA, HB0/DJ3HJ, OM3LA & PA3GWN while on **80M** he logged: 2I0NIE, 3B7C, AM9ML, EI100MFT, M0TFO & TS6A.

Nicky, EI9JF has again sent on an extremely large log containing 5000 QSO's since the last edition.

Using a Yaesu, FT2000, 400w into a 4 element SteppIR he logged: ZD7X, C91R, VQ9X, HK3O, CO6XW, RA2FT, UN0OA, EA8AUZ, EW8EC, VE3FZ & RA2FF on **10m** while on **12m** he logged: OJ0B, SP6CES, SM5AOG, DL6UNF, RW4NH, I3JSS, PA5TT, HA8ZB, HB9QQ, OH2EI, F5LGF, TT8PK, OZ5UR, ES2NF, 3B7C, RA2FF, 9U0A & LA4HC.

15m netted: OJ0B, ZS6WN, TY5ZR, J6/DL7AFS, 5Z4/YT1CS, 5L2MS, 3C7Y, C52C, J88DR, FM/K9NW, VP2MDG, HC8N, OD5/F5PTM & HR2DMG.

17m worked: 7Q7BP, FW0MO, CP1XRM, VQ9LA, 8S6LGT, RV9CPC, TF3DC, EU3AR, 4X1FC, KH7Y, 4S7HIG, VR10UW, 6K2AVL, CO6WD, JA7COK, 9N7JO, YU3A, UN7QX, TL8CK, MD0CCE, GJ0KYZ, LU7HF, A92HB, 5L2MS, 8R1PY, VP8NO, HS0AC, YK9SV, ZD7X, OX3XR, TG9ADM, J88DR & 8P9NX and **20m** worked: HK3OZ, 3C7Y, R1AND, HC2AQ, VK3MO, OY4M, V8BDS, V26BZR, C31CM, JS8JYV, 9U0A, HP1XX, HC2SL, TF3GC, BA4ALC, 4U1UN, 7Z1HL, 9N7JO, J39AH, XE3RNK, VK4JCF, HL3IB, KL7HBK, EK3GM, 6Y5WJ & EY8MM.

Using a 2 element beam worked the following **30M** contacts: Z29KM, 8R1PY, JA1CLW, HP3XUG, VK2GWA, VR10UW, ZP4KFX, 3B7C, TI8II, PJ4/W9NJY, P41USA, FW0MO, NJ2BB, YU60BCD, 9M2/JH3GCN, OJ0B, CO6XE, GM4KGK, HL0LMP, ZL1BYZ, J88DR, 5R8FU, MD0CCE, 5L2MS, ES4MM, HV2IL, EX2F, VK7SM, J3/DL7VOG, 9M2GCN, 9Y4NW & VE9WW.

Also with 2 elements on **40M** worked: MM0SJH, YY4ABH, LU4DGX, VE3FZ, CO2NB, OD5/F5DTM, VK3XU, A52AM, FM5LD, T960A, HL3IUA, VR10UW, J3/DL7VOG, 4S7NE, 3W9R, VK9WWI, 9U0A, 8P6DR, 5L2MS, TT8PK, EA6UN, 8R1PY, T70A, JW/G3SXW & T80W. Using a dipole logged these **80M** contacts: 5B4AIF, J3/DL7VOG, 3B7C, GM3UA, 4Z5KO,

(Continued on page 8)

(Continued from page 7)

D44AC, FM5LD, CE2NKA while
160M netted : CN2FF, OZ8KR, C52C,
MD0CCE, EY8MM, PA6Z, OZ1GMC,
SP3MEP, UR5LIZ .

Declan, EI9FVB has again been busy
and participating in a few of the various
contests and working some special
event calls.

Running an Icom IC-756 Pro2, 400W
into a MQ24SR beam antenna worked
these following **10M** contacts : VP8LP,
1A3A, T70A, EE3E, CQ9K, S52ZW,
LZ2SX, YO3FRI, 9A7A, HB0/
HB9AON, OL7T, YT6A, C50C, CT9L,
UT7QF, RU6CC & DR1A.

He was particularly active on **15M**
adding 15 new ones to his totals for this
band. He logged : V55V, FY5KE,
ZD8N, J3A, P40W, VC3J, W6AAN,
CX6VM, HH2FDY, 6Y1V, FS/K1XM,
Z37M, PZ5XX, V47NW, T70A, FM/
K9NW, V26B, PJ4E, P43A, T93J,
3DA0WW, HI3T, J88DR, EA9LZ,
5R8RJ, ZD7X, SV9CVY, CE6ABC,
C52A & 6W1SE.

20M netted : 4U1WRC, J48YL,
9K2MU, KB5RHD, J79PAK, TO1YR,
CN8ZG, PJ2F, V26B, 5B4AFB,
9H1DE, EX2M, 5N8NDP, C91R,
SA7AUH, IS0T, LX/EI2JQ, VK6NU,
HI3TEJ, VE3SY, 5Q1A, MM0AOQ,
TU2/F5LDY, OJ0B, SV3DCX &
UA9BA.

Usind a dipole for **40M** he logged :
UX2MK, DL0B, EA9LZ, AN4EB,
DL40RRDXA, ON4YN, M0IQD,
5N47NDP, CQ9K, RL3A, P33W, HB0/
HB9AON & EA8/ON4HIL .

With an **80M** dipole he scooped :
OJ0B, GB0REZ, GW0AAA, OT6T,
HB9AG, 5Q1A, OS4T, V55V, NP4A,
UA9PM, W2VP, EJ9HQ, T99W,
MU0GSY, 4L4WW, 9K2HN, ES5MC,
MM0NDX, Z36A, TK/HA8RM, OH0/
SP7VC, TS6A, MW5W, 1A3A, HB0/
HB9AON & GU0GUX.

As always, sincere thanks have to go to
all who contribute their logs, although
someone asked me recently if it was
only EI9's that were active.

It would be nice to get perhaps a few
more regular contributors from EI/GI so
we could change this layout a bit.

Also special credit to be given to
Bernie, W3UR, editor of the Daily/
Weekly DX, HS0ZDY who I met re-
cently, ARRL & EI5DI for his full re-
port on 3B7C.

Until next issue, best DX.
de Dave EI9FBB

The 2007 World Radiocommunication Conference (WRC07)

The World Radio Conference of the International Telecommunications Union commenced in Geneva on Monday October 27th and will continue until 16 November. The Irish Delegation at the conference comprises five members three of whom are holders of experimenter licences. They are John Breen EI7BV and Rory Henchy EI4DJB of the Department of Communications, Energy and Natural Resources and Samuel Ritchie EI6FZB of ComReg.

It is hoped that the Conference will agree to a new allocation to the amateur service of 150 kHz at 5260 to 5410 kHz. The European Common Proposal from the CEPT Countries supports this by way of an appropriate footnote to the ITU Radio Regulations. It is also proposed that existing allocations at 135 kHz become a worldwide secondary allocation at 135.7 to 137.8 kHz. IRTS has received assurances that Ireland will be supporting these proposals at the Conference.

Looking ahead to WRC-'11 it is hoped that the present Conference will agree to include on the agenda for the 2011 Conference consideration of an allocation in the range 50 to 54 MHz in the European Region of the ITU as well as a worldwide secondary allocation in parts of the band 415 to 526.5 kHz..

Hams Named to Top NASA Posts

Three astronaut hams, including two women, have been appointed to top positions in NASA.

Bob Cabana, KC5HBV, has been named Director of the agency's Stennis Space Center in Mississippi. He will be succeeded in Houston as Deputy Director of the Johnson Space Center by Ellen Ochoa, KB5TZZ, who had been Director of Flight Crew Operations there. Meanwhile, Astronaut Peggy Whitson, KC5ZTD, arrived at the International Space Station in mid-October, where she takes over as the first woman commander of a space station crew.

Coincidentally, a Discovery mission scheduled for late October was to be commanded by Astronaut Pamela Melroy (not a ham as far as we know).

It will be the first time two women were simultaneously commanding two separate spacecraft.

South Dublin Radio Club Christmas Party

This year's South Dublin Radio Club Christmas Party will take place on Tuesday the 11th of December.

After last year's success, the venue will remain the same; "The Morgue", Templeogue from 8.00 p.m. until late.

Members of other clubs and visitors are very welcome to this social event.

It's always a great turnout. Limited free food will be available for paid up members while visitors can choose from the bar menu up to 9.00 p.m.

The club will then go on Christmas holidays until the return on 8th of January

Cork Radio Club Annual General Meeting

At the Annual General Meeting of the Cork Radio Club, held on September 5th 2007, the following committee was elected:-

Cathaoirleach; Con EI7DJB
Cuntasoir; Dick EI6HH
Runai; Frank EI6EV

Committee Members:

John EI8HS, Vincent EI7HN, Finbarr EI1CS and Tony EI9ID.

The club meets every Monday evening at the Cork Foyer on Assumption Road in Blackpool.

Visitors and new members are always welcome.

Outgoing QSL Bureau

Please mail your cards
directly to the
Outgoing Bureau Manager:

Anthony Baldwin

EI8JK,

Rathlin, Kilcrohane,

Co. Cork.

ei8jk@amsat.org

CQ-IR - The IRTS Jubilee Contest



Some of the operators at EI75IRTS:
Standing: Sean EI7CD, Brendan EI3GV, Paul EI5DI, Thos EI2JD.
Seated: Keith EI4JM, Peter EI7CC, Paul EI2CA, Tony EI6EW.

Despite very poor conditions many stations entered into the spirit of the 75th Anniversary celebrations and came on the HF bands for the CQIR Contest.

There was something surreal about working station in Argentina, struggling with his English, and receiving the exchange '59 Clare 1824'!

There is no doubt that for many of the overseas Irish, this was a really an emotional experience and indeed for many of the operators on this side we were surprised on lots of occasions by the sudden appearance of an Irishman from some far flung corner of the globe.

EI75IRTS was operational from the Phoenix Park in Dublin with a state of the art station active on whatever bands we could find open.

A Rhombic antenna at 65 feet held up by four four-wheel drive cherry-pickers really gave us a big signal into the states. The towers came thanks to the 'Height for Hire' company and the pre-contest pile ups on the Friday evening made the effort of putting up such a big array well worthwhile.

A tri-bander on a mobile tower (thanks to Thos 2JD) and high dipoles for 40 and 80 completed the antenna set up. It was just a pity that conditions did not hold up for the duration of the contest.

The logs are been adjudicated at present and full results will be published in the next issue of Echo Ireland. In the meantime, why not have a look at the soapbox comments and the details of the overseas Irish stations on the IRTS website.

The overseas draw winner will get a week for two at Kinnity Castle while the EI/GI winner will enjoy a weekend in New York.



CQ-IR Draw

The draw for the prizes in the CQ-IR contest will be made on Saturday December 8th at 1300 in the Comfort Inn in Portlaoise.

This is a public draw and anyone interested is invited to attend.



ESB Line noise

How to locate it and get it fixed

By **Brendan Minish EI6IZ**

IRTS EMC Manager

ei6iz.brendan@gmail.com

The first thing to do when trying to track down any noise problem is to eliminate the possibility that it could be anything in your own house, to do this connect your radio to a 12v battery and remove the main fuse for the house.

Did the noise go away?

If the noise disappeared the source of the noise is in your house, try turning on the household circuit breakers one by one until the noise reappears, what is connected to that circuit breaker?

Seemingly innocuous items such as the chargers for mobile phones, low voltage lighting, or TV sets in standby can be big sources of interference.

If the noise did not go away when you turned off the mains to the house then the noise source is external to the house and it's time to do some noise hunting.

Line noise like most forms of noise is only audible on AM or SSB receivers, it is not directly audible on FM receivers although it can of course prevent weak signals being heard on FM receivers.

A distinct characteristics of power line noise is that is very wideband, covering from LF right up to VHF and beyond. The level of the noise will be uniform across any given amateur band, other noise sources such as switch mode power supplies will show characteristic noise peaks separated at regular intervals corresponding to the switching frequency of the switch mode PSU(s) causing the interference

Using a 6m or 2m SSB receiver (or even an Air band scanner) see if you can hear the noise, If you have a directional antenna take a bearing on the noise. On 6m with a Yagi antenna, line noise can be audible for several Km from the source. On 2m it is audible on a directional antenna for about 500m from the source.

Now that you have an idea of the direction that the noise is in, it is time to take a drive around and see if the source of the noise can be located.

The best band to start listening on when driving around is 6m. Don't worry about not having a proper 6m mobile antenna, a normal 2m 5/8 antenna works quite well for 6m receive (and in some cases 6m transmit as well).

Pay no attention to noise heard right under ESB wires; many of them are a little noisy when right under the wires.

You are looking for a whole area where the noise is strong, On 6m you should hear the noise for about 500m or around quite a few poles in a given area.

When you find the noisy area on 6m it is time to go to 2m SSB or AM and repeat the process, you have to be much closer to the noise source to hear anything on 2m.

Finally go to 70cm SSB or AM, On 70cm you should be able to narrow the noise source down to 1 or 2 poles. If you have a 70cm beam you should be able to identify which pole is the problem, alternatively you can use a scanner set to UHF Air band or 70cm AM and hold it under the suspect poles. The one with the strongest signal is the likely source.

Before calling in the ESB it is important to verify beyond doubt that the noise you are hearing at home is coming from the noisy pole you have found. The best way to do this is to have an assistant at your station that you can communicate with by radio or telephone and have them transmit the noise from your shack to you and compare it with what you are hearing locally on your receiver.

Once you are sure that you have found the source of the noise call the ESB, tell them that you have a line noise problem and that you know which pole it is. Try if possible to be available to meet the linesman when he is going out to look at the problem. Unless you have found a serious line fault such as a line down or a pole fire do not expect an immediate response!

The ESB are willing to assist with fixing line noise issues but don't expect them to find the problem for you as they don't have any way of knowing what is interfering with your radio and it can be very time-consuming for the ESB to find sources of line noise.

Power line noise has quite a number of causes but the primary cause is loose hardware, either in the current carrying parts of the system or with the insulators.

One other thing, don't interfere in **any way** with ESB hardware or attempt to identify the source by hammering on poles.

If the noise is due to a damaged insulator or other loose hardware, interfering with ESB property could be very dangerous and is illegal.

There are some good Web resources on finding and curing line noise.

The ARRL has many documents on interference issues at <http://www.arrl.org/tis/info/rfign.html> and in particular this page covers line noise:

<http://www.arrl.org/tis/info/rfi-elec.html>

and this Book (available for free in electronic form) is an excellent resource:

Power-Line Noise Mitigation Handbook for Naval and Other Receiving Sites

http://www.arrl.org/tis/info/HTML/power_line_handbook/

Howth Martello and HMS Monarch

I am the licence holder of the amateur radio call-sign EI0MAR at Ye Olde Hurdy Gurdy Museum of Vintage Radio* which is located in the Martello tower in Howth, Co. Dublin (built 1805).

The tower has many links with early telecommunications. In fact its original purpose was as a watchtower for an expected French invasion during Napoleonic times.

In 1852 the first submarine telegraphic cable between Britain and Ireland terminated in the Martello tower.

In 1903, Lee de Forest demonstrated his wireless telegraphy system to engineers from the British Post at the Martello and communicated with a similar station in that he had set up Holyhead.

Two years later, further wireless telegraphy experiments were carried out in Howth. These particular experiments were carried out by W. Duddell and J.E. Taylor at the request of Mr. Gavey, Engineer in Chief of the Postal Telegraph Department and were a follow-on from experiments carried out the previous year in Bushy Park, London.

W.Duddell had recently designed a thermogalvanometer capable of measuring aerial (antenna) currents and consequently the Howth experiments were among the earliest quantitative wireless experiments to have taken place. The main object of the experiments was to measure aerial currents in the receiving aerial as the distance varied between the transmitting and receiving stations.

A Marconi wireless telegraphy receiving station was set up in the Martello tower. The H.M. telegraph ship Monarch sailed from Scotland to Howth and then from Howth to Holyhead and back.

This ship was equipped with transmitting equipment and recorded the distance from Howth for each test transmission.

A wavelength of about 200 metres was used for the experiments (1.5 MHz.).

Mr. Duddell and Mr. Taylor presented a paper on their findings to the Royal Institution in May 1905.

The Monarch had a vertical aerial 84'6" long and used its own steel hull as an "earth". The vertical receiving antenna in Howth was almost 93 feet long and the "earth" consisted of four wire mesh mats



31 feet long and 4 feet wide in the shape of a cross laid out on the grass directly under the aerial.

For some experiments a coil of wire dropped into a well in the basement of the tower was tried as an alternative "earth". The metal sheathing of the submarine telegraph cable was also tried but the wire mesh was found to be the most effective "earth".

The main conclusion drawn from the experiments was that ***"the current in the receiver air wire is almost exactly inversely proportional to the distance between the transmitter and receiver so that the product of the received current and distance is practically constant."***

There were slight anomalies in some readings taken when the Monarch was close to Howth. Suggested explanations for these anomalies were reflections and shielding of the radio waves by Howth Head and the local islands of Lambay and Ireland's Eye.

Additional experiments were then carried out while the Monarch was anchored at Kingston (now Dun Laoghaire) 6.5 miles south of the Martello tower.

Howth Head (600 feet) obstructed the signal path from Kingston. The main purpose of these experiments was to measure the effects of daylight and darkness on radio signals.

The conclusion drawn from these particular experiments was that ***"no effects directly traceable to atmospheric disturbances were observed while taking the***

readings at Howth."

At the conclusion of the formal presentation to the Royal Institution, there were several contributions from the floor and several written contributions were also read out.

Mr Gavey made a very interesting contribution. He said; ***"Mr. Marconi has told us that in long-distance wireless telegraphy the effects vary very materially by day and by night after a certain distance has been reached If measurements are to be extended (with Duddell's thermogalvanometer)..... right across the Atlantic, I think it possible that the means of overcoming the difficulties that Mr. Marconi has experienced in the past may be realised. It certainly will be interesting to note at what particular point the linear law drops off and some other unknown law comes into play."***

A Capt. Jackson also addressed the meeting and made the observation; ***"I have never found any appreciable increase in distance when the length of the aerial was more than half a wavelength."***

Both these astute and incisive observations were made in the days before the effects of the ionosphere on radio signals or antenna theory were understood to the extent that they are today.

There were many detailed graphs, charts, illustrations and explanations included in the presentation.

However, in depth discussion of these is beyond the scope of this document.

They are recorded in the official records of the Royal Institution for 1905.

In conclusion, may I humbly say what a marvellous feeling and a great privilege it is to operate amateur radio station EI0MAR from the Martello tower in Howth where these experiments took place over a century ago.

Tony Breathnach (EI5EM)
July 2007

* <http://ei5em.110mb.com/museum.html>

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D-STAR - a first look.

with John Ronan EI7IG and Brian Meskill SWL, TSSG, Waterford Institute of Technology.

As part the Enterprise Ireland Funded project, GAISS[1] here in the TSSG[2] Research Group, WIT, we evaluated some D-STAR[3] equipment for the purposes of ascertaining its compatibility with, and as a possible alternative to APRS. The radios used in were an Icom IC-2200H and Icom E91A.

Background

D-STAR is an open protocol although it is published by JARL, it is available to be implemented by anyone. While Icom is the only company to date that manufactures D-STAR-compatible radios (Kenwood reportedly released a D-STAR replacement for the TM-D700 in Japan), any equipment or software that supports the D-STAR protocol will work with a D-STAR system. D-STAR systems can be built using both commercial and homebrew equipment and software.

In the D-STAR system, the air link portion of the protocol applies to signals travelling between radios or between a radio and a repeater. D-STAR radios can talk directly to each other without any intermediate equipment or through a repeater using D-STAR voice or data transceivers. D-STAR also specifies how a voice signal is converted to and from streams of digital data, a function called a codec. The D-STAR codec is known as AMBE™ (Advanced Multi-Band Excitation) and the voice signal is transmitted in the D-STAR system at 3600 bits/second (3.6 kbps).

The D-STAR system supports two types of digital data streams. The Digital Voice (DV) stream used on 144 and 440 MHz contains both digitized voice (3600 bps including error correction) and digital data (1200 bps). Using a DV radio is like having both a packet link and FM voice operating simultaneously. The Digital Data (DD) stream, used only on 1.2 GHz, is entirely data with a bit rate of 128k bps. The data connection to a radio that uses DV is via an RS-232 interface or USB 1.0. An Ethernet connection is used for high-speed DD D-STAR data. Ordinary terminal emulation software (DV) or a Web browser (DD) will do just fine for exchanging data.

We were interested in setting up one radio with a GPS (commonly called a "tracker" in APRS parlance) and one as a base radio, and seeing how well they functioned for relaying GPS location information.



Icom IC 2200H (see text)

Configuration and test

The following are the steps required to completely configure a Linux (specifically Ubuntu 6.10) PC to listen on a serial port for broadcast D-STAR signals and to convert these signals to APRS packets and put them on the APRS-IS backbone. All the commands written below were run from a terminal window.

Machine Preparation

Firstly, Ubuntu 6.10 Desktop was installed on the machine. Once installed the latest updates and upgrades were retrieved for the machine using the following commands:

```
sudo apt-get update
sudo apt-get upgrade
```

Following this Sun Java[4] should be installed as described. The binary file was downloaded to the desktop from <http://java.sun.com>. The permissions on the file were changed to allow the file run as an executable.

```
cd ~/Desktop/
chmod 740 jdkFilename
```

Next, the jdk file was double-clicked on the desktop and "run in terminal" was selected from the options (NOT run). Once this was done and the EULA accepted, the resulting terminal window was closed. Having done this, the JDK was moved to /opt

```
cd ~/Desktop/
sudo mv ./<JDKDirName> /opt
```

Where JDKDirName is the directory name Sun's JDK was extracted to. Once completed, soft links were created to allow the use of Java commands without full pathnames every time. This is done as follows.

```
cd /usr/bin

sudo ln -s /opt/<JDKDirName>/bin/java ./java
sudo ln -s /opt/<JDKDirName>/bin/javac ./javac
sudo ln -s /opt/<JDKDirName>/bin/javaws ./javaws
sudo ln -s /opt/<JDKDirName>/bin/java_vm ./java_vm
sudo ln -s /opt/<JDKDirName>/bin/jar ./jar
```

The additional API RXTXcomm.jar[5] will also be required so the following commands should be executed.

```
sudo apt-get install librtx-java

sudo ln -s /usr/share/java/RXTXcomm.jar /opt/
<JDKDirName>/jre/lib/ext/
```



Icom IC-E91

The next step was to install the java program that will convert the D-Star data to APRS. This program was downloaded from <http://www.aprs-is.net/dstartnc2.htm> Once downloaded, the jar file was extracted and a file called dstartnc2.cfg was created in the same directory.

The contents of dstartnc2.cfg were as shown below.

```
PortClassName=RXTXIntf
SerialPortName=/dev/ttyS0
SerialToTCPPorts=14550
APRSToTNCPorts=14551
TNCSpeed=900
```

Radio Configuration

Next to be configured was the receiving D-STAR radio (IC-2200H). To configure the receiving radio, make sure:

- digital mode is on (manual pg 61)
- auto transmit is off (pg 68)
- speed setting is 96 (pg 68)
- *VITAL* GPS beaconing switched off (pg 72)

The last option isn't well documented and caught us out for a while.

The radio was attached to the serial port using a 3-wire RS232 cable.

Once this was done, the sending radio (IC-E91) was configured. It was connected to a GPS device using a 3-wire RS-232 cable.

The following settings were used.

- TX message should be a valid check-summed message (manual pg 52)
- Likewise for GPS message (pg 59)
- GPS Mode On (pg 58)
- Auto transmit on (pg 60)
- DV Data Tx set to auto (menu>DV Set Mode>DV Data Tx)

Running the Software

Run the program from inside DPRS_Program with the command

```
sudo java cp DStarTNC2.jar DStarTNC2
```

Simulated data, while looking 'real' will not work. Please make sure to use real GPS data, simulated positions are received via the serial socket but not passed to APRS via TCP (discarded by DPRS program).

Successfully transmitted GPS data, viewed using an APRS client application:

```
# Keep-Alive Line
```

```
EI7IG>APJ123,DSTAR*:!5215.22N/00711.22W>093/002 Test
```

```
# Keep-Alive Line
```

```
# Keep-Alive Line
```

```
EI7IG>APJ123,DSTAR*:!5215.21N/00711.26W> Test/
A=000071
```

Discussion

Though we were only interested in the digital 'APRS like' capabilities, we did some checks with Digital Voice. Apart than sounding slightly robotic, it seemed to work quite well though with a slight, 'GSM' like, lag on the audio.

Reportedly the audio is intelligible beyond the range of normal analogue voice links, though we did not test if this assertion was true.

The DPRS Software made the output from the GPS enabled D-Star radio completely compatible with APRS, though we had great fun getting the radios configured correctly.

We also tried just sending data over the link. In theory, it should be possible to treat the '3-wire' RS-232 interface as a very long cable. This isn't quite true in practice as there is no error correction on the data stream, so, if there is any interference on the channel, the bytes will be lost or corrupt in transit. This means that any application that wishes to use D-STAR as a transport layer needs to have error-detection and correction built in.

D-StarLet [6] is one such system, though we have not tested D-StarLet. What potentially makes this extremely useful is that it seems possible to use the channel for voice and data simultaneously, quite useful when one considers the possibility for de-sense from two transceivers operating in the same band.

With the price of the equipment (about €500 for a D-Star capable radio), I doubt D-STAR will become popular in Ireland, though for AREN purposes we may investigate further for Emergency Communications purposes.

[1] <http://www.tssg.org/archives/2007/03/gaiss.html>

[2] <http://www.tssg.org>

[3] <http://www.icomamerica.com/amateur/dstar/default.asp>

[4] <http://java.sun.com/>

[5] <http://www.rxtx.org/>

[6] <http://www.d-starlet.com/>



Kenwood TMD-700A (See text)

GAREC 2007 - Huntsville, Alabama.

The third event of its kind, and the first ever held in the United States, the Global Amateur Radio Emergency Communications Conference (GAREC-07) took place August 16-17 in Huntsville, Alabama, just prior to the 2007 ARRL National Convention and Huntsville Hamfest.

Almost 100 people from all over the world came to Huntsville, making this truly a global event. GAREC's prevailing theme, how to apply advanced technologies to emergency communications, was echoed throughout the two-day event. From presentations to discussion groups to emergency vehicle displays to information about the latest in hardware, GAREC attendees had a sampling of just about everything pertaining to the Emergency Communications arena.

According to IARU International Coordinator for Emergency Communications Hans Zimmermann, F5VKP/HB9AQS, "Compared to the first two GAREC conferences [held in Tampere, Finland], the number of international participants was considerably lower. Region 1 [Europe, Africa, the Middle East], was represented by Ireland, France, Bulgaria, Finland, The Netherlands and South Africa. Region 2 [the Americas] had representatives from Brazil, Canada, the United States and Trinidad and Tobago. Region 3 [Asia and Oceania] submitted a detailed report, but sent their regrets due to a collision of dates with a major regional event."

Dennis Dura, K2DCD, attended GAREC on behalf of the ARRL and gave presentations on the topic of using VoIP, EchoLink and IRLP for establishing and maintaining communications during hurricanes. The session discussed the methods of combining RF links to the internet to establish a cohesive network. The VoIP Hurricane Net is another tool that Amateur Radio operators, the National Weather Service, the National Hurricane Center and emergency managers use to gather detailed information on local conditions.

Other presentations included the use of new technologies and modes in Emergency Communications, such as ALE, EchoLink/IRLP, D-STAR, **Winlink 2000** and TSSG, an advanced system being developed in Ireland.

Outside of the conference venue, various Emergency Communications agencies brought their vehicles. Sarratt said, "An

impressive fleet of emergency communications vehicles added a perfect hands-on hardware feel to GAREC. The vehicles were on display and tour for visitors to learn about serious mobile communications." These vehicles, hosted by Alabama Homeland Security, Alabama Baptist Disaster Relief, American Red Cross, The Salvation Army and the Tennessee Emergency Communications Association, were very popular, drawing large crowds. "Luckily, no emergencies occurred to take the vehicles away from us this weekend," Sarratt said.

Conference Recommendations

While GAREC is not a decision-making body, its ideas and proposals will be submitted to the IARU to be included for discussion at their next Administrative Council meeting, scheduled for June 2008. These ideas may also be discussed at each of the three IARU Regions' upcoming meetings.

The conference made the recommendation to introduce the call sign suffix "/D." This suffix would be used by those in the Amateur Radio Service who handle traffic related to emergency and disaster situations. According to Pitts, this recommendation, made by Willem Visch, PG9W, would let anyone listening immediately know there was emergency traffic and lessen the chances of someone unintentionally breaking in on an emergency net.

Another recommendation included the extension of "EmComm Party on-the-Air." These are Emergency Communications exercises already in place in Region 1. Seppo Sisatto, OH1VR, Region 1 representative, proposed holding two annual international drills, lasting only 4 hours, beginning November 11.

GAREC suggested that the IARU initiate studies in cooperation with its Member Societies and with specialized emergency communication groups.

These studies would focus on the development and possible introduction of standard codes for use in international emergency communications, as well as on the need for the development of a list of standard resource types.

The conference announced its support of the IARU's Administrative Council decision to collect information from all Member Societies about the status of imple-



EI Delegate at GAREC 2007 John EI7IG with ARRL C.E.O. Dave Sumner K1ZZ

mentation and application of the revisions to Article 25 of the ITU Radio Regulations (RR) resulting from WRC-03.

The part of Article 25 concerning Emergency Communications says "Amateur stations may be used for transmitting international communications on behalf of third parties only in case of emergencies or disaster relief. An administration may determine the applicability of this provision to amateur stations under its jurisdiction" (RR 25.3), and "Administrations are encouraged to take the necessary steps to allow amateur stations to prepare for and meet communication needs in support of disaster relief" (RR 25.9A).

GAREC appealed to all of the IARU Member Societies, as well as specialized emergency communications groups, encouraging the accession to and ratification of the *Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Response Operations* by their respective national authorities.

The US has not yet ratified this document, but **word was received during GAREC that Ireland announced their accession to Tampere**. There are currently 37 countries that have adopted *Tampere*.

The conference also appealed to the IARU to "further encourage the development and the application of new modes and technologies in emergency communications," and to support the development of training aids.

This includes the handbook on emergency communications, initiated by the 2005 and 2006 GAREC conferences, "and the development of a handout to in-

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form the public, in particular during major conferences such as the forthcoming WRC-07, as already decided by the IARU Administrative Council in 2005." GAREC also asked the IARU to "continue its support to the continuation and further development of the GAREC concept and process."

GAREC also asked Amateur Radio contest organizers to include a provision in their rules that contest participants avoid frequencies in the immediate vicinity of the Center of Activity frequencies (as proposed at GAREC-05); these frequencies are 14.300, 18.160 and 21.360 MHz. According to Pitts, "This would minimize interference to weak or distant stations which may be passing emergency traffic, but not heard in the contest din." Region 2, of which the US is a part, has not adopted the Center of Activity frequencies, but they will be discussed at the next Region 2 meeting in Brazil next month.

Conclusions

Zimmermann said, "With the conference in Region 2, GAREC has established itself in a major event in the field of Emergency Communications. What started in Region 1 as an independent event, has in 2006 found wider attention due to its combination with the International Conference on Emergency Communications (ICEC-06) and now with the ARRL National Convention in 2007".

EI delegate, John Ronan EI7IG made a presentation on using APRS with existing Search and Rescue position reporting systems.

He gave background and context to EmComm in Ireland, explained the purpose of the Proof of Concept funding from Enterprise Ireland, and went on to describe the GAISS project, the project trial, the problems, results, and the feedback we received from South East Mountain Rescue Association (SEMRA). There was great interest shown after the presentation, with people impressed at the level that AREN was getting involved with other organizations.

John issued a 40 page report to the IRST committee and it is available to any member who contacts the secretary at info@irts.ie

Ship Monitoring on your PC

Did you ever see a ship out at sea and wonder what it's name was and where it was heading? A new system can show this information.

Recently at South Dublin radio club I demonstrated a new Data mode used to receive ships position and overlay then on a map. The new standard is called AIS (automatic identification system) and is transmitted on the frequencies 161.975 (Marine Ch 87) and 162.025 (Ch 88) MHz. Ships broadcast their identity, position, course, speed and destination so that other ships can take account of their movements. Using a low cost radio scanner tuned to one or other of these channels and ShipPlotter software running on your PC, you will be able to see a radar-like real-time map (see attachment) of all the large ships manoeuvring in your area together with information about their destination, estimated time of arrival and even the dimensions of each vessel. The system is similar to APRS used on Amateur Bands.

The system is very particular to good quality audio connection between the receiver and the PC so a discriminator output is better than the headphone connector. Most old scanners can be modified to give this output. See: <http://www.discriminator.nl> for details. Any wide-band receive two metre receiver with a packet connector can be used without modification.

Once the information is picked up it can be shared with other users via the internet. A good example is <http://www.aisliverpool.org.uk> however there is very little coverage of the east coast of Ireland and no coverage of the South and West. I am hoping to set up receivers on the east coast to add to the world system but I need others to set up receivers in the South and West of the country.

The software can be downloaded from: <http://www.shipplotter.com>
After 21 days the software needs to be registered for 30 euro.

I have a very limited number of free marine radios modified with discriminator outputs for those who are willing to set up permanent listening stations. Contact me on 087-7731120 for more information
Daniel Cussen EI9FHB



David Ryan EI4HT with his new wife Ellen after their wedding in Doncaster.

South Eastern Amateur Radio Group

Congratulations to the following on achieving their new call-signs:
Francis EI5GOB, Declan EI5GRB and Brendan EI5GNB.

100 years of Royal Naval Radio

The Royal Naval Amateur Radio Society celebrated 100 years of wireless telegraphy in the Royal Navy at the end of October.

HMS Ganges Association held a reunion at the Savoy Hotel, Bournemouth, lasting from Friday until Monday. Many thousands of Boy and Junior Telegraphists, later known as Radio Officers, ROs, were trained at HMS Ganges, near Harwich, from 1907 until the establishment closed in 1976.

At 15.00 on Sunday 28th October, GB100WT was used to re-create Marconi's historic first transmission across the water from Bournemouth to Alum Bay on the Isle of Wight.

Next IRTS Committee Meeting

**Saturday December 8th
at 1100
Comfort Inn, Portlaoise**

3B7C

on Ile du Sud in Saint Brandon

The story by Paul O'Kane EI5DI

3B7C was the fourth major DXpedition organised by FSDXA, the Five Star DXers Association. FSDXA has its origins in the Chiltern DX Club (CDXC) – initially a UK-only group of DX and contest enthusiasts, but now with members worldwide.

Their first DXpedition was to Spratly Island (9M0C) in 1998, and the second to the Comoros (D86C) in 2001 broke all records – with 168,000 QSOs logged by a team of 26.

In 2004, the 3B9C DXpedition to Rodrigues Island logged over 150,000 QSOs, second only to D68C. I was fortunate to be included in the 3B9C team – it was a great experience, and I jumped at the opportunity when invited to join 3B7C on Ile du Sud in Saint Brandon.

This was to be a bit different from previous FSDXA ventures – in particular, it would be Zero Star rather than Five Star. Instead of hotels, many of us would be camping, food would be basic (but sufficient), we had to transport our own generators and fuel, not to mention food and drink. Last but not least, travelling by boat was the only option for the final 400 kilometer leg of the journey across the Indian Ocean from Mauritius.

Ile du Sud is little more than a sandbar, about 1km long and 250m wide, but big enough for our planned antennas, and with a couple of permanent buildings, normally used as fishing lodges, with room for the shack and accommodation for 12 people.

Predictions indicated that there could be up to 170 hours of usable propagation each day across all bands, and accordingly a team of 20 operators would be appropriate. Neville G3NUG and Don G3BJ, our joint leaders, made two journeys to Mauritius and Ile du Sud to make all necessary arrangements and to plan the antenna layout.

We would have 12 separate stations and antennas, including two each on both 20m and 80m so that we could run CW and SSB simultaneously on those bands, possibly the only way to reach our target of 100,000 QSOs. There would be 6

Quadra linears which could be shared between the “day” and “night” bands. If those band openings overlapped, we could always run barefoot – 200 watts from the Yaesu FT2000 rigs.

FSDXA has amassed an enviable collection of antennas, the beams all mounted on 40 ft poles including a complete rigging harness for each one. They remain in storage between expeditions. We had additional receiving antennas, including beverages and K9AY loops.

- 6m: 7 el Yagi Trident TA6M7L DX
- 10m: 6 el Yagi Force 12 EF-610
- 12m: 4 el Yagi Force 12 EF-412
- 15m: 4 el Yagi Force 12 EF-415
- 17m: 4 el Yagi Force 12 EF-417
- 20m: 3 el Yagi Cushcraft 203CD (SSB)
- 20m: 3 el Yagi Trident TA20M3L (CW)
- 20m: Pair of Trident phased verticals
- 30m: 2 el Yagi Trident TA30M2L
- 30m: Pair of phased verticals
- 40m: Four-square with elevated radials
- 80m: Pair of Titanex V80S phased verticals for SSB
- 80m: Pair of Titanex V80S phased verticals for CW
- 160m: Titanex V160S 85 foot vertical



Masts for the beams - all at 40 feet

The plan was to arrive on Ile du Sud on Tuesday 4th September, to operate from midnight local time on Friday 7th to 8 am on Tuesday 24th. Everything went to schedule. I left Dublin on the morning of Sunday 2nd September on a Heathrow flight, followed



A quiet day on the Indian Ocean

by a leisurely transfer to Terminal 3 for the evening flight to Mauritius. This flight was full, and long (11h:30m) and uncomfortable and I got hardly any sleep. It arrived on time in Mauritius at 7:30am on Monday 3rd September.

Don G3BJ had arranged taxis across the island to Port Louis, about 30 miles by dual-carriageway during the morning rush-hour, and with traffic cops at every junction. The Mauritius countryside is as green as Ireland, but the crops are different – mostly sugar cane. Away from the towns, the buildings are generally low quality, although better than the ones I had seen in Rodrigues in 2004.

We went straight to the boat (the Sainte Rita) in the port. It's a converted trawler, 34m by 7m, with bunk accommodation for all 20 of us. Nearby, there were a few beat-up Taiwanese fishing boats unloading their catch of frozen tuna.

An advance party had arrived in Mauritius a couple of days earlier and all our equipment - mostly antennas, cables and rigs - had already been loaded, having been shipped earlier by container from Southampton.

The boat left on time about midday – giving us a very nice view of the jagged mountains around the town, and in an hour or so we were into the open sea and getting the taste of the Indian Ocean. A few of the team didn't like the taste, the boat rolled a lot and it was very difficult to move around.

Twelve out of twenty of us were seasick, some seriously, for almost all the 28 hours of the journey.

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I didn't get sick, which I attribute entirely to a life-long policy of clean living and self-denial. Some said it was the sight of others getting sick that got them started, but I was quite happy lying in my bunk while the guy above was gradually filling his bucket. It was difficult to sleep due to the constant rolling. The best approach seemed to be to lie on your back with arms and legs out – that way you were less likely to roll out of the bunk. For an account of another DXpedition to St. Brandon in 1997 where most of the team were also seasick, see www.wr6wr.com/newSite/articles/features/olderfeatures/3B7RF_DXped.html.

By Tuesday afternoon, 4th September, everyone, including the crew, was glad to see calmer water indicating the end of the journey. It was a bit strange seeing Ile du Sud for the first time – there's hardly anything to see! You begin to understand why when you realise it used to be called the Cargados Carajos Shoals. It's little more than a collection of reefs, rocks, shoals and small islands extending some 50 miles north to south and up to 5 miles wide – with nothing else around for hundreds of miles. The island was hit by a cyclone earlier this year and was completely submerged for a while – this left much of it one metre higher due to coral sand being washed up.

We transferred to small boats and got ashore about 4:30 pm. There wasn't much daylight left and the main priority was to get the tents up, made more difficult by the constant wind. I had bought a tent in Dublin (it was shipped in the container) and tried it out in the back garden to make sure I knew in advance what to do. I was in it, and asleep by 8pm – catching up on the sleep I had lost on the previous two nights. We were all up at 5.00 the next morning for a light breakfast, ready to start work at 6. We spent the morning lugging stuff from the boats up to the shack and along the beach. In the afternoon I was assigned to one of three antenna teams with Don G3XTT, Pete SM5GMZ, and Arnie N6HC. The 40m 4-square was first to be erected, and we finished by 6pm as daylight faded.

There was plenty more work from 6am the next day – our team still had to erect the 6m, 10m, 15m and 30m mono-banders – all at 40 feet and with similar



10m beam almost ready

rigging procedures. We dug shallow trenches for sand anchors at each of the four anchor points. The work was finished on Friday morning, giving us a few hours rest before we hit the bands at midnight on Friday (9pm local time in EI).

My first shift was at 4am on Saturday morning on 30m CW and it was tough going. It's in these circumstances that you realise, or remember, that operating in DXpeditions can be mentally very demanding. I had an 8-hour break and was on 20 CW from 4-8pm on Saturday evening. This was also tough, but rates were higher and I ended up with 810 QSOs for the day.

After that, one day tended to blend into another. All you think about is operating, sleeping and eating. Meals were scheduled in two sessions, so that we could eat immediately before, or just after a shift. This didn't always work out so conveniently in practice, as you might be expected to start early, or finish late, to catch possible openings. However, it's fair to say that none of us went hungry. The food was nearly always rice, with either fish or meat, and an appropriate sauce. Spaghetti was an occasional welcome alternative to rice. You sleep whenever you can, although it wasn't possible to sleep in the tent during the day because of the heat – but there were other places that did nicely. We had running water and flush toilets and the only real hardship was cold showers. These were a shock to the system at first – there's not much of a tradition of cold showers in south Co. Dublin. After a few days, however, the water seems warmer and you begin to wonder if you're getting a bit odd when you start to look forward to them.

Verticals:

Clive GM3POI was anxious too see how simple vertical antennas would perform compared to the Yagis. The first one we

tried was a 30m ground plane, close to the water, with two radials elevated at about 2 metres. It was amazing – better in all directions over the water. This is due to the almost perfect conductivity of salt water, which has the effect of reducing the angle of radiation, but only for vertical elements. It was so good that, whenever the pileups became unmanageable, I simply switched to the 2-el 30m Yagi for a while. After that, verticals for other bands soon appeared. The only disadvantage was that they were more prone to introducing inter-station QRM compared to using the beams.

We had no problems using CW and SSB simultaneously on both 80 and 20m. This was due to the extensive use of bandpass filters between the transmitter and the linear, and a high-power low-pass filter after the linear. The bandpass filters included stock Dunestar filters together with custom units designed and built by Tony G0OPB. Finally, the CW and SSB antennas were spaced hundreds of metres apart. They were so far apart that power losses in the coax became an issue – being of the order of 2db or more on 20m. There were occasional problems with breakthrough from one band to another, mainly from the 12m station when its beam was pointed to Japan. The solution was to turn the beam to Europe!



The Shack

With regard to turning beams, they were all done manually. A rotator arm was clamped to each mast, and the positions for Japan, Europe, and US West Coast were marked with lumps of coral in the sand. At night, a good torch was essential so that you could avoid any birds nesting in the sand. What direction should you turn the beam? We had propagation charts for each band that gave propagation forecasts (and actual QSO charts) for each hour of the day. These were updated and circulated daily

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by Eric K3NA, and were an invaluable operating aid. For example, 20m closed at about 2200 local time most evenings, but nearly always opened again to the US West coast at 0030 for at least an hour.

We were operating in fairly cramped conditions, up to ten of us at a time in a room about 10m by 6m. It was very impressive to see the room at night, with a pool of light around each op, and the rigs and computer screens glowing, and fingers typing away in atmosphere of almost complete silence – except, on occasion, for one or two SSB ops who didn't always understand what the Mic Gain control is for.

Seriously, there is no reason whatsoever to raise your voice when operating SSB. It may OK when you're operating alone, but it's likely to be a serious irritation to other operators. One way of avoiding this problem is to use in-ear or noise-cancelling phones – you can even get ones that combine both features.

In-ear phones form a tight seal when fitted properly, and are very effective at keeping external noise out. They also tend to have a great low-frequency response, just the job for separating CW signals in a pileup – you can adjust the passband and pitch controls on the rig so that the signals resonate at such a low frequency your teeth almost rattle! If you use the typical brand of phones you'll not know about this, but once you've tried in-ear phones you'll never go back.

Operating Statistics:

We had 19 operators, each on for at least 8 hours per day for 17 days. That's approximately 2580 hours for 137,000 QSOs – giving an average of 53 QSOs per hour. As any serious contesteer knows, that's not exactly a good rate! I can often do much better from home with just 100 watts. However, DXpedition operating is not the same as contest operation. The pileups can be ferocious and intimidating and we had to face them every day, at any time of the day or night, for 17 days – with no time off. It's hard work. Sometimes you get a session when propagation is good, the bands are relatively quiet, there's not too many stations calling at once, and you're on form – picking them off quickly. Even so, it's hard to get the last-10 rate much above 200 at any stage – you can sometimes get the last-100 rate above

180, but anything over 150 is considered good going. On the other hand, there are times when the bands are dead or dying. My slowest hour accounted for just 4 QSOs, and in another 2-hour period on 20m one night I logged only a dozen stations. It's probably true to say we worked the HF bands dry. If there was an opening, chances are we found it. We may not have worked everyone who wanted Saint Brandon, but it wasn't for the want of trying.

Another reason for the relatively slow rates is that most DXers are not contesters. Contesters don't waste time, but many DXers do! It may not be immediately obvious, but DXpeditions are contests – we're trying to log more QSOs than any other DXpedition, and each operator wants more QSOs than the other team members. Yes, it's a team effort, but personal pride comes into it too. Anything that speeds things up helps the team, the operator and other callers who wouldn't otherwise get in the log.

Wasting Time:



Home Sweet Home for EI5DI

How do you waste time? It's really easy.

1. Send our call. We know who we are, and we know you're calling us. We don't ever want to hear our call.
2. Send your call continuously – without a break. Yes, you may have full break-in, but we can't be certain and this practice is very frustrating.
3. Send your call twice. That's a mortal sin! Chances are we got your call the first time and now you're forcing us to wait until you send it again.
4. Send your call when you can't hear us.

What you should do is send your call once, wait two seconds, then repeat!

OK, you've hit the jackpot. You hear your call followed by 59(9).



Buzzed by a Fairy Tern

What should you not do?

We don't want to hear your call again, unless you're correcting what we sent. In particular, we don't want to hear your call twice (a common JA practice).

We don't want to hear anything other than "Roger five nine" on phone, or "R 5NN" on CW.

We don't want to hear FB TU 5NN 5NN 599 599 GL 73, or any other combination. Reports don't matter, you're not doing anyone a favour by sending "actual" reports. We don't edit reports, they're always left as 59 or 599 in the computer. Finally, don't end by sending your callsign again – for the third time. We know your callsign – didn't you just hear it from us a moment ago? Once again, if we got your call correct, say "Roger five nine" on phone, or send "R 5NN" on CW – nothing else.

Break the pileup:

Now the hard bit – how do you get us to pick out your call from all the others who are calling? That's not so easy to answer. In a small pileup, you can match the frequency of the previous caller. However, when pileups are big, too many people try this and end up QRMing one another. In general, it's best to go towards the upper third of whatever split is used. Say, or send, your full call once – and do it efficiently, not always the same as doing it fast. On SSB, if the range is up 5 to 10, try up 8. The worst bet is to call exactly 5 up because fully 50% of callers do that. If you're not stronger than the others, you have to be different in some other way. The next best option is to go up 12 or up 3. The DX operator is looking for an easy life and can easily pick up callers at the edges of the pileup. Listen carefully to what the DX operator says. We might say "There's no one on 158" or even just "one five eight" – you can bet that whoever reacts fastest will get the QSO, even

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if they're not strong. Sometimes it can be a complete lottery. I spent most of one session spinning the tuning knob (within the announced frequency split) after every QSO and working whoever I found on the new frequency. We do whatever it takes to maintain a good rate.

How can you make sure you don't get into the log? It's easy – make a nuisance of yourself. Call when the DX station is working someone else. Call when you can't hear the DX station. Call from EU when we're working NA only. Sometimes I did work renegade callers, but only to get them to shut up. They'll be a long time wondering why they're "not in log".

Another way of wasting time is to call us when you're already in the log. It's understandable if you're not sure about the first QSO, but it's unwelcome when the website has been updated and you know you're in the log. All you're doing is preventing other callers getting through. By the end of the trip our dupe rate was running at more than five per cent. It's not a problem if we're calling CQ and getting no answers, but please don't do it just because you can, or to get a QRP QSO or to try to work all the DXpedition operators.

QRP:

As for QRPers, DXpeditions don't like them. Come to think of it, does anyone like QRPers? All they do is make life difficult for the rest of us. We have to do all the work to copy their lousy signals. A word of advice for anyone who chooses to run low power – you should earn your QSOs on the same terms as everyone else and not beg for special treatment by signing /QRP after your call. It doesn't impress anyone on a DXpedition and it won't be logged. I personally don't work callers signing /QRP except as a last resort. One wasted more time by telling me he was running only 2 watts – I replied that I was running only 200 watts. He was probably proud of what "he" had done.

RTTY:

QRPers may be bad, but RTTYers are the pits. RTTY is a primitive digital mode that cannot be decoded by people. It's a legacy of the electro-mechanical monsters of the 1960s, but now even less relevant in an age when anyone who can string more than two lines of code to-

gether can present a new digital "mode" to the grateful world. You don't believe me? In October 2007, the ARRL Contester Rate Sheet reported on two new



The Shack

narrow-band digital modes called JT2 and JT4. I intend to hold out until the arrival of JT56 – that should be really effective!

It happens to be easy to get on RTTY, or any other digital mode, because it's mostly done by software and is supported by all modern rigs, but that doesn't imbue it with any particular merit. Most RTTY QSOs consist of little more than a few mouse clicks – about as worthwhile as a game of Space Invaders, but not as much fun. It's a computer-to-computer activity, not person-to-person as amateur radio should be. While operating CW on 3B7C, we used to get constant requests for RTTY. One way of keeping them quiet was to reply with "RTTY 5NN".

Join A DXpedition

How do you get invited to join a DXpedition? It's not too difficult, but it can take a while. Join CDXC – that's a good start. Practice your CW, and get a reputation as a contester on both CW and SSB. You should be proficient at both, and you'll need to know your way around computer keyboards and logging software. 60% of all QSOs on St. Brandon were CW. You don't even have to be a DXer to be useful, although knowledge and experience of propagation never goes to waste.

I got my DXCC in 1964 and promptly stopped counting. Even now I have no idea of how many countries I've worked. I still jump into pileups occasionally, but only for the fun of it and not to chalk up new countries.

Morse Runner by VE3NEA is probably the most useful tool for getting to grips with CW pileups. Several of the 3B7C team used it for 15 minutes each day for

a few weeks before the DXpedition. It certainly helped me. When dealing with CW pileups, it's always tempting to use the narrowest filter the rig has, but it can be more efficient to leave the filters on wide and do the filtering in your head. That's because you hear more callers at once, and this increases your chances of getting a full call the first time. Yes, it's harder at first, but it's often the way to work them faster – and that's the main priority on any DXpedition. Morse Runner is free from www.dxatlas.com/MorseRunner.

Costs:

How much do DXpeditions cost?

They're not cheap. The direct costs were 2,000 pounds sterling for each team member (about 3000 euros), not including travel to Mauritius – another 1000 euros. I could have bought a nice rig or a fancy tower for that money. On the other hand, I had the satisfaction of being a team member on the third most successful DXpedition of all time, in terms of QSOs logged, and of visiting a part of the world that very few people will ever see.

How much does each QSO cost? We had 20 people, representing direct costs of 80,000 euros for a total of 137,000 QSOs – or 58 cents per QSO. By the time you consider overheads and the investment (and depreciation) in transceivers, amplifiers, cables, antennas and filters, the true cost is probably double that. Please remember this when sending your direct QSL.

FSDXA could not undertake such DXpeditions if it were not for the generous donations from corporate sponsors and from clubs and individuals worldwide. Irish sponsors were particularly generous – including IRTS, the Shannon Basin Radio Club, and EI2CA, EI2CN, EI2GLB, EI2JD, EI4DW, EI4GK, EI7BA, EI7CC, EI7CD, EI7GY, EI8BP and EI8JR.

Residents:

There are no permanent residents on Ile du Sud. For 8 or 9 months each year there are three or four people looking after fishing parties from Mauritius – it's too dangerous to stay on the island during the cyclone season.

There are two types of seabird. The white ones are Fairy Terns, and they were almost tame. Most of the time they

(Continued on page 20)

(Continued from page 19)

ignore you, unless you move too fast or get closer than a foot or so. Then they take off, and hover around your head - making it easy to get good close-up photos.

The others, called Brown Noddys, were a little more aggressive, and would swoop around at great speed if you got too close to their nesting sites. They're not a bit like "real" birds. They don't chirp and they don't eat bread! Instead, they cackle and squawk and quack and crow, and they eat fish and insects. There was a great racket from them at most times. Often, when operating SSB, I could hear their squawks in the headset (we operated with the rig's monitor on), and so, presumably, could our callers.

There were little crabs that lived in holes in the sand during the day, and came out at night - you had to be careful not to step on them. Ticks were an unwelcome surprise. They are like little black beetles with a hard shell, and from 1 to 4mm across. If you gave them half a chance, they would sit for days getting fat on your blood. The first most of us knew about them was when we found them firmly attached to fingers or toes - but hadn't felt a thing previously. Most of them came from the shack. They would drop from the roof, then march across the table or floor looking for a suitable finger or toe. You couldn't flick them off, and it was very difficult to remove them without using tweezers. I took one from Ivan G3IZD's back (at the dining table) this way, and he said to everybody "It's funny, but the first I knew of it was when I was scratching my back" - I said, "Fine, but don't start scratching anywhere else!" (Actually, I was a bit more specific than that).

There were a few cockroaches too, but generally they weren't a problem. One surprise was the turtles that were hatching all round the island. They tended to get lost in the sand while trying to find the sea - they seem to be programmed only to travel downhill.

We all amused ourselves by pointing them in the right direction and watching as they battled the waves to get clear of the beach.

It feels good to liberate baby turtles, even if few of them will survive for long - they're just too small and vulnerable.

We arrived on the island at the time of a

new moon. The nights were pitch dark and we had a great view of the Milky Way when the skies were clear. Another surprise was the number of cloudy days, although it was always pleasantly warm. Near the end of our stay the moon was full - it was remarkably bright due to reflections from the white coral sand - no torches were needed when outdoors. Someone had brought a pack of solar lights to mark the path between the shack and the other building - this soon became known as the Champs-Élysées.

Green Flash:

On the second or third day on the island, it was getting towards sunset when Eric K3NA asked us if we had heard about the "green flash"? Apparently, it was something that can occur immediately after sunset - just where the setting sun is. I thought about it for a while and decided that, if there was such a thing, it was probably an illusion caused by staring at the sun for too long. After all, wasn't I in my 60s and I had never heard of such a thing before?

I was busy explaining this to anyone who would listen when Eric said you could also see it just before the sun rose, so it could hardly be an illusion. I kept quiet after that and, sure enough, just as the rim of the sun sank under the horizon, a bright green light appeared and then disappeared after a second or two. Well - that was impressive! Unfortunately, I wasn't able to photograph it on other days because it was either cloudy or I was operating, but some of the others saw it again. For a full explanation, just google "green flash".

Leaving the Island.

On Monday 23rd September we started dismantling and packing the antennas as bands closed. All operation finished on Tuesday morning, and the remaining antennas came down.

All coax and electrical cables had to be



Going Home



Fairy Terns - almost tame

rewound onto drums, and the whole island scoured for debris. We took the opportunity to pick up other rubbish that had been washed ashore - it was mostly footwear, flip-flops in all shapes and sizes. On Wednesday morning the tents were taken down and packed - I left mine with one of the locals, and by 8am we were back on the Sainte Rita for the return journey to Port Louis.

It was a smooth journey for most of the day, but after dark the wind rose and the waves grew. This time we were hitting them head-on, with the bow going high in the air and then crashing down again. I was asleep when this started, and when I awoke it was like lying on your back in a roller-coaster. The bunks were right up at the bow and we were weightless at the top of each wave.

The usual suspects were sick all over again - I must be doing something right. The next day we had to mooch about for three hours just outside the harbour entrance.

Apparently there had been a fight between some Indonesian sailors and at least one was dead. The police closed the harbour until they nabbed everyone concerned.

We still had time to have a hot shower, followed by a good meal (no rice and no fish) before heading to the airport for the night flight back to London. This time I had a row of 4 seats to myself and was able to sleep a bit.

Anyway, I can thoroughly recommend DXpeditioning to anyone. Remember to go to the edge of salt water and bring a vertical.

Here's looking forward to the next FSDXA operation - if you whisper Pacific and Sunspot Maximum you'll not be too far out.

Paul O'Kane EI5DI
October 2007

WAI Ultimate Award



George GI4SRQ being presented with his Worked All Ireland Ultimate Award by Noel EI6HW.

To qualify for the Ultimate Award you must work 1400 square, 32 Counties and 25 islands.



City of Belfast Amateur Radio Society

COBRAS (GI2BX) are based in the Social Club of the famous Shorts aero-engineering firm in Belfast and as GB2MGY are closely associated with the nearby SS Nomadic, the original tender ship of the Titanic.

If you have any queries do please feel free to contact David EI3GKB / GI8SKN

PR Officer, COBRAS
07740 865 501

EI4IP 4m Activity

Robbie EI4IP, now living in West Waterford, is very active on the higher bands and you can hear a recording of his transmission on 4 metres as heard on 4m by VE9AA July 7, 2007

<http://www.youtube.com/watch?v=bvob51xAvc8>

<http://www.70mhz.org/forum/viewtopic.php?t=1152>

Contest Calendar

All Times UTC

November 2007

3	Sat 0600 - 1000	IPA Radio Club Contest (1) -	CW
3-4	Sat 1200 - Sun 1200	Ukrainian DX Contest -	CW/SSB
3	Sat 1400 - 1800	IPA Radio Club Contest (2) -	CW
3-5	Sat 2100 - Mon 0300	ARRL Sweepstakes -	CW
4	Sun 0600 - 1000	IPA Radio Club Contest (3) -	SSB
4	Sun 0900 - 1100	High Speed Club CW Contest (1) -	CW
4	Sun 1400 - 1800	IPA Radio Club Contest (4) -	SSB
4	Sun 1500 - 1700	High Speed Club CW Contest (2) -	CW
10-11	Sat 0000 - Sun 2359	Worked All Europe DX-Contest -	RTTY
10-11	Sat 0700 - Sun 1300	Japan International DX Contest -	Phone
10-11	Sat 1200 - Sun 1200	OK/OM DX Contest -	CW
16	Fri 1600 - 2200	YO International PSK31 Contest -	PSK31
17-18	Sat 1200 - Sun 1200	INORC Contest -	CW
17-18	Sat 1200 - Sun 1200	LZ DX Contest -	CW/SSB
17-18	Sat 1600 - Sun 0700	All Austrian 160 m Contest -	CW
17-19	Sat 2100 - Mon 0300	ARRL Sweepstakes -	SSB
17-18	Sat 2100 - Sun 0100	RSGB 1.8 MHz Contest -	CW
24-25	Sat 0000 - Sun 2359	ARRL International EME Competition -	All
24-25	Sat 0000 - Sun 2400	CQ WW DX Contest -	CW
24-25	Sat 0000 - Sun 2359	CQ WW SWL Challenge -	CW
29	Thu 0000 - 0600	QRP ARCI Topband Sprint -	CW/SSB
30-2	Fri 2200 - Sun 1600	ARRL 160 Meter Contest -	CW

December 2007

30-2	Fri 2200 - Sun 1600	ARRL 160 Meter Contest -	CW
1	Sat 0000 - 2400	TARA RTTY M���� -	RTTY
1-2	Sat 1600 - Sun 1800	TOPS Activity Contest -	CW
8-9	Sat 0000 - Sun 2400	28 MHz SWL-Contest -	CW/Phone
8-9	Sat 0000 - Sun 2359	ARRL 10 meter Contest -	CW/Phone
12	Wed 0130 - 0330	NAQCC Straight Key/Bug Sprint -	CW
14	Fri 2100 - 2300	Russian 160 Meter Contest -	CW/Phone
15	Sat 0000 - 2400	OK DX RTTY Contest -	RTTY
15-31	Sat 0001 - Mon 2359	Lighthouse Xmas Lights QSO Party -	All
15-16	Sat 1400 - Sun 1400	Croatian CW Contest -	CW
15-16	Sat 1600 - Sun 1559	International Naval Contest -	CW/SSB
23	Sun 0200 - 0959	RAEM Contest -	CW
26	Wed 0830 - 1059	DARC XMAS-Contest -	CW/SSB
29	Sat 0000 - 2359	RAC Canada Winter Contest -	CW/Phone
29-30	Sat 1500 - Sun 1500	Stew Perry Topband Distance Challenge -	CW

For details of smaller contests and links to contest rules and results try the following:

WA7BNM Contest Calendar <http://www.hornucopia.com/contestcal/>

SM3CER Contest Service <http://www.sk3bg.se/contest/>

QRP Does Work

Tony EI5EM was on holidays recently in the Algarve and on the evening of the 16th of September was relaxing on the first floor balcony listening to 20 metres on his Elecraft KX1 qrp transceiver. Band conditions seemed good and the 25 foot antenna wire draped over the balcony with a 10 foot counterpoise seemed to be receiving well. The first station heard calling CQ was EI6IZ, Brendan in Mayo. More in hope than in expectation, Tony, operating as CT/EI5EM, replied to Brendan's call. Contact was made and reports exchanged. Tony's KX1 had an output power of 3 Watts. Taking this QRP level and the compromise antenna in use into consideration, Tony was pleased to receive a 519 report from Brendan and to give a 599 in return.

This CW QSO serves to prove what can be achieved on CW even at such low power levels and with an improvised antenna. Of course great credit must go to Brendan, EI6IZ for plucking Tony's weak signal out of the QRM and QRN to complete a really satisfying QSO.

SSB Field Day 2007 Garbally College, Ballinasloe.



IRTS President, Finbarr Buckley EI1CS
and Mark Connaughton EI1511



Eddie Kavanagh EI3FFB and Fergus Millar EI6IB



Pat O'Connor EI9HX



Tony Casey, EI3HA preparing the Barbecue

For the past few years, both CW and SSB Field Days have been held at a central location, Garbally College in Ballinasloe, thanks to Niall Foley EI4CF.

This was done in an effort to make field days more enjoyable, especially for restricted stations who could all operate from the grounds of the college where welfare facilities are readily available.

This has proved reasonably successful over the past few years but unfortunately, this year, the support was at an all-time low.

SSB Field Day, held over the first weekend in September attracted only one EI entry. This was the host club, the Shannon Basin Club, using the call sign EI3Z/P.

Propagation on the high bands during the weekend was generally poor - the club had no QSOs on 10 metres and just a few on 15 metres.

20 metres produced some excellent DX at times, but suffered from deep fading at other times.

Weather conditions were good for the field day station and the operators and visitors to the site enjoyed the now famous barbecue on Saturday evening, superbly prepared as usual by Tony EI3HA

Now is the time for clubs who are planning their programmes for the year to have a look at participating in Field Day and the SSB one should be within most people's capabilities.

Irish Radio Transmitters Society 80 Metres Counties Contest Tuesday January 1st 2008 1200-1500utc

EI's on EQSL

(as at November 2nd 2007)

DXCC Confirmed				Worked All States	
170	EI7BA (+4)	Approved	50	EI9FBB	Approved
153	EI3IO (+4)		50	EJ9FBB	Approved
141	EI4CF (+4)	Approved	49	EI9HQ	
128	EI2JD (+9)	Approved	49	EJ9HQ	
123	EI9FBB (+9)	Approved	48	EI4CF	
115	EI6IZ	Approved	45	EI6HB	
114	EJ9FBB (+14)	Approved	45	EI3IO (+1)	
97	EI6HB		45	EI4IS (+2)	
91	EI9HQ	Approved	43	EI8GP	
88	EJ9HQ	Approved	41	EI7BA	
86	EI8IU (+2)		37	EI5IF (New)	
86	EI6AL (+6)	Approved	37	EI7JN (+2)	
85	EI5IF (New)		36	EI2JD	
78	EI6JK		32	EI7CC (New)	
78	EI9ES (+4)	Approved	20	EI6JK	
76	EI8FH (+5)	Approved	17	EI0W (New)	
75	EI9FVB (+5)		1	EI7IW (+1)	
67	EI7IX (+2)	Approved			
67	EI2II (+8)	Approved			
				Worked All Zones	
65	EI7M		39	EI7BA	
62	EI8GP		38	EI9FBB	
61	EI4IS		37	EI3IO	
60	EI7JN		37	EI4CF	
59	EI8DL (+4)	Approved	32	EI7CC (New)	
59	EI8DD (+5)		32	EI2JD (+1)	
58	EI9JF		31	EI5IF (New)	
57	EI/DH0GSU/p		24	EI6JK	
56	EI1DG		22	EI7JN	
55	EI0CZ		14	EI0W (New)	
54	EI7IQ		6	EI7IW (+6)	
54	EI9JM (+2)				
51	EI8JR (+7)				
				Worked Prefixes	
50	EI6AK		772	EI4CF	
50	EI4HH (+6)	Approved	655	EI2JD (+38)	
49	EI6CPB (+1)	Approved	571	EI3IO (+43)	
48	EI3HA (+3)		518	EI7CC (New)	
47	EI0W (New)		469	EI9FBB (+97)	
46	EI7BMB		404	EI7BA (New)	
45	EI7BFB		294	EI5IF (New)	
44	EI6ARB (+4)	Approved	249	EI6JK	
44	EI8JK (New)		535	EI9HQ (+289)	
43	EI7IM (New)		299	EI9FVB (+74)	
41	EI3EBB		217	EI0W (New)	
41	EI4HQ		213	EI7JN	
39	EI6IF		193	EI9JM	
39	EI9CF		167	EI8IU	
34	EI3JB (New)		166	EI8DL	
30	EI90GPO		37	EI7IW (New)	
30	EI1KARG (+2)				
25	EI2FS				
22	EI7GM				
21	EI7IW (New)				
20	EI0CPL				
20	EI2IV				

<http://www.eqsl.cc/eqslcard/eDX100Standings.cfm?SortOrder=C>

Report submitted by EI2JD

EI DXCC Listings

(as at November 4th 2007)

Mixed		RTTY/Digital		No Entry
345	EI7CC	Satellite		No Entry
340	EI2GS			
339	EI8H	160m		
334	EI6FR	141	EI3IO	
324	EI6S	80m		
315	EI3IO	*	104	EI4BZ *
306	EI2HY	40m		
270	EI2CR	*	118	EI9FBB *
262	EI2GX	112		EI7GL
247	EI9FBB	*	112	EI4BZ
232	EI4BZ	109		EI2JD *
230	EI9JF	*	30m	
220	EI7BA	106		EI4BZ
217	EI2JD	*	20m	
174	EI8IU	205		EI9FBB *
166	EI6IZ	*	150	EI4BZ
151	EI5GM	*	148	EI2JD *
128	EI8HA	131		EI7BA
120	EI6HB	121		EI9JF *
114	EI9HQ	*	110	EI3GV *
Phone		100		EI9HQ *
344	EI7CC	17m		
338	EI2GS	111		EI7BA
331	EI8AR	*	15m	
330	EI8EM	164		EI4BZ
320	EI6S	114		EI2JD *
300	EI8AU	*	105	EI7BA
277	EI3GV	*	108	EI3GV *
253	EI4GK	114		EI9FBB *
242	EI9FBB	*	12m	
202	EI2JD	*	No entry	
186	EI7II	10m		
177	EI9FE	134		EI4BZ
177	EI9JF	*	128	EI4GK
166	EI7GL	124		EI2JD *
165	EI2CH	113		EI7GL
157	EI7BA	6m		
147	EI4BZ	152		EI3IO *
127	EI8IU	104		EI7GL
119	EI4HH	101		EI3EBB
114	EI4EX	2m		No entry
109	EI9HQ	*	QRP DXCC	
105	EI9HX	No Entry		
105	EI1CS	DXCC Challenge		
101	EI3IP	1357		EI7CC
100	EI6HB	1197		EI3IO *
CW		DXCC Honor Roll		
310	EI7CC	Mixed		
220	EI4BZ	345		EI7CC
188	EI7BA	340		EI2GS
152	EI6IZ	*	334	EI6FR
134	EI2JD	*	Phone	
128	EI9JF	*	344	EI7CC *
112	EI8IU	338		EI2GS
109	EI2IH			
109	EI4HM			
107	EI/GM4ARJ			
106	EI1DG			

New entrants & updates are marked *

Clifden Celebrates 100th Anniversary of Transatlantic First. John Corless EI7IQ reports...

On Wednesday October 17th, members of Galway Radio Experimenter's Club and Clifden Chamber of Commerce got together to celebrate the one hundredth anniversary of the the first commercial transatlantic message to be transmitted across the Atlantic.

The message was sent from the Marconi station just outside Clifden to a station in Glace Bay, Nova Scotia, Canada on October 17th 1907. This original transmission, though not the first successful radio transmission, launched the then new medium to the world.

A special transmission was set up to mark the centenary event; a telegram from President McAleese to the Nova Scotian community, was superbly keyed by Tom Frawley EI3ER – himself a former marine radio officer with the Marconi company.

The anniversary was a great opportunity for the amateur radio community to show off it's wares to the public and great credit is due to the Galway Radio Experimenters Club who did an excellent job in this regard.

The gathering was a strange mix of dignitaries, heroes, radio amateurs, radio officers, local politicians and local people.

Star billing went to Princess Elettra Marconi-Giovanelli, daughter of Marconi himself, who was accompanied by her son Prince Guglielmo. The Princess made her way to the site for the event in an original fully-restored Marconi carriage.

The Ambassadors of Canada and Italy were also there, as was the President of Clifden Chamber of Commerce, Mr. Gerry King.

The Irish Radio Transmitters Society (IRTS) was represented by it's President Finbarr Buckley EI1CS. Indeed there were many amateurs present



for the occasion. Brendan Minish, EI6IZ, the IRTS EMC Manager and a key member of the Mayo Radio Experimenters' Network, operated one of the special event stations; the other was manned by members of GREC.

Mike Hayes, EI2EO, a former marine radio officer for the Marconi Company, in full uniform, was a top attraction. Mike looked a natural in the uniform and was central to all the events of the week-long festival hosted by Clifden for the occasion. He even set up a radio museum in the town for the week.

I have visited the Marconi site on a number of occasions, the most recent last November when I went there with Rob Mannion, G3XFR/EI5IW. I have to say that on these past visits the site was in a disgraceful state.

I was very pleased to see that a sign indicating directions to the site had been erected on the Ballyconneely road – a sort of admission by the state that the site does actually exist. A new gravel road has been laid right up to the actual site itself. This was a welcome discovery,

because what was there on my previous visits was impassable, except possibly for tracked excavators or the like. So well done to all involved with that.

"My father would be very happy to see all the people that gathered around this wonderful place today," Princess Elettra



Princess Elettra Marconi-Giovanelli
with Mike Hayes EI2EO

Marconi-Giovanelli said.

"He loved Ireland very much and wanted the Clifden radio station to be a powerful one, and it has been in history."

She said that her father was very grateful to the people in Canada who helped and encouraged him to build his station in Glace Bay. "I am delighted to be here today and to be with the Ambassadors of

Canada and Italy representing their countries.

I want to thank Gerry King of the local Chamber of Commerce who has organised this wonderful event. I also wish to thank all the friends who have gathered here; I'm delighted they could attend. My son Guglielmo, Christine Jameson all the radio amateurs who have turned out to celebrate the event."

In his address Fr. Finbarr Buckley, EIICS, said that radio experimenters were continuing the work of Marconi. He added that both the hobby and the IRTS were in great shape, and said that this was the 75th anniversary of the formation of the IRTS.

"The first president of the IRTS was Col. Dennis who claimed to be the first ever amateur experimenter in the world," Fr. Buckley said. "He attended a lecture on wireless, given by Marconi in Dublin in the 1890s. The colonel was so affected by the talk, he went back to his home in Baltingalss, Co. Wicklow, and started experimenting and so began the process and from that grew the Irish Radio Transmitters Society.

This year is our diamond jubilee. We're delighted to be here for the occasion and it's great to see so many experimenters and radio officers here."

Patrick G. Binns the Canadian ambassador to Ireland extended warm greetings from the Government of Canada.

"The great Italian, Marconi, connected our two countries," the Ambassador said. "His work is appreciated more than we know. On most days we don't stop to think about the significance of wireless communications. It has been a very significant development, much has been possible over that wonderful last hundred years from that first transatlantic transmission to the devices we now use without thinking" The Ambassador linked the numbers of Irish people who emigrated to Canada in difficult times to the Marconi connection.

"They might have gone to Glace Bay and inland to Toronto," he said. "You find the

same community names and the same family names in Glace Bay as you do in Connemara and this has to be down to the Marconi link between the two places. It's a great connection," he added.

"There's a great golf course in Clifden and there are great golf courses in the Glace Bay area of Nova Scotia and with that in mind I am proposing that we set up a golf tournament for a new Marconi Cup which will be put up by the Canadian Government for the event. Let's build on Marconi's achievements," he said.

Princess Elettra said she was very moved by the proposal of the Canadian Ambas-



IRTS President Fr. Finbarr Buckley
EIICS with Princess Elettra

sador to set up the golf tournament in the name of her father.

Lucio Alberto Savoia the Italian ambassador began his address by saying that he must now take up golf lessons.

"Marconi was an Irish-Italian genius," Ambassador Savoia said. "I am delighted to be here for the wonderful celebration representing Italy. I want to congratulate the local people and communicate the gratitude of the Italian Government, the Minister for Foreign Affairs and the Italian people, to the people of Clifden and Ireland for the celebration."

The Ambassador added that he was in Glace Bay a number of years ago at a tree planting ceremony near the site of where the first transatlantic signal was received. "The emotion of the people there was very real and the affection they had for



Coleman Shaughnessy, Radio Officers Association,
Princess Elettra, Prince Guglielmo and Mike EI2EO

the Irish people was very noticeable," he said.

Gerry King President of the Clifden Chamber of Commerce said that the celebration of Marconi in the area started with the seventy-fifth year celebrations when the Princess came to Clifden.

"She came here in May of last year and we put the proposal to her that we had big plans for the centenary and she offered to come here with her son which was fabulous," he said. "We got the local amateur radio club on board – the GREC, and the Wildlife and Parks arm of the state who own the 300 acre site. We built the new road and we made a festival out of it, not just a day. We had local historians giving talks, we organised walks, we had video presentations and we involved the local schools."

Driving away from the event one couldn't be but impressed at the achievements of Marconi a hundred years ago.

It's a shame it took us most of that time to properly acknowledge his presence in the area let alone the worldwide significance of his achievements.

The signpost and new road are a start. There's talk of the possibility of an unmanned interpretive centre being built, but then the Minister for Finance says that exchequer receipts are down so it's hard to predict if that'll ever happen. I hope it does.

Great credit is due to the GREC who built an impressive station for the event and the numbers in which the amateur community turned out for the event.

But more needs to be done, to release the well-kept secret that the hobby is, to the general public.



Tom Frawley EI3ER

WRCs and the Radio Amateur

A timely look back at how and where we got the bands we take for granted today

(This article is based on the reports of the time that appeared in QST. These are available from the ARRL QST-CD collection)

Note: In keeping with the time the old notation of cycles per sec (c/s), rather than Hertz (Hz) is used, where it is relevant.

This year as we mark the 75th anniversary of the IRTS it is also relevant and appropriate to recognise two other anniversaries of significances for amateur radio.

60 years ago on the 2nd October 1947 the International Telecommunication Union's conference, held in Atlantic City USA, concluded.

Cairo 1938

The previous ITU conference was held in 1938 in Cairo, as tension was rising in the World. At that conference the upper limit of the table of frequency allocation was 200 Mc/s (now referred to as MHz) with the old 5-meter band (58.5 to 60 Mc/s) being the highest band allocated to the amateur service at that time.

Atlantic City 1947

The Atlantic City conference was the first to be held following the Second World War and as a consequence of all the wartime technology developments there was significant work to be done in reviewing and expanding the international table of frequency allocations up to 10Gc/s.

Prior to the conference, which had commenced almost 5 months earlier in May, the IARU as part of its preparations reported that there were encouraging indications from the various member societies that their governments would support and defend amateur allocations during the conference.

Although amateurs lost some spectrum in the 40m and 20m bands, – the former only being finally redressed at the last WRC in 2003 – the outcome of the 1947 conference was very beneficial for the amateur community.

15m Band granted

A new HF band was obtained at 21 Mc/s and above 30 Mc/s the basic structure for

the amateur bands up to 10 Gc/s was established. This includes the VHF 2-meter band, the UHF 70-centimetre and 23-centimetre bands along with microwave bands at 13-cm (2.4 Gc/s), 6-cm (5.7 Gc/s) and 3-cm (10 Gc/s).

Washington International Radiotelegraph Conference

At the end of November this year there is another anniversary of similar if not more significant for amateurs. 80 years ago on the 25th November 1927 the Washington International Radiotelegraph Conference concluded. This was the first conference to address the use of the HF or shortwave band at an international level.

In doing so the concept of the international frequency allocation table, that we still have today, was developed.

As with the Atlantic City Conference 20 years later, the Washington Conference was a major milestone in the development of amateur radio. It was at that conference that amateurs were allocated the main HF bands (160m, 80m, 40m, 20m and 10m) that we still use today. An additional band at 5m was also allocated.

These bands are based on those allocated to American amateurs a few years previously, on a national basis, where not only was there a harmonic relationship between the bands but also with the bandwidths. This gave US amateurs 500kc/s on 80m, 1Mc/s on 40m and 2Mc/s on 20m.

The outcome of the 1927 conference gave European amateurs significant wider bands than their governments had initially intended. Some Administrations had proposed a different set of bands and also proposed that the bands agreed should be very narrow, with narrow being defined as "bands not over 100kcs wide".

The "economic demands for international waves" was quoted as a reason for restricting the spectrum allocated to amateurs.

However in so far as the American amateurs were concerned there was disappointment with the outcome, as they suffered a cut in the amount of spectrum that they previously had on a national basis, though this was offset by providing, for the first time, a common set of bands for



Ole LA2RR, Chairman of IARU Region 1 representing IARU at a CEPT meeting

amateurs worldwide.

Country Prefixes established

The 1927 conference also established for the first time a new system for call signs that included nationality. It developed a table of callsign country prefixes with the table listing 82 sets of country prefixes. Ireland – listed as the "Irish Free State" – obtaining the EI prefix.

1979 Conference

WARC bands granted

Although the amateur service had significant success in both the 1927 and 1947 conferences it was not until the 1979 conference, a time lapse of 32 years and four further international radio conferences, that they have a similar success in gain access to new bands.

At that conference amateurs were once again successful in obtaining additional HF allocations at 30m (10 MHz), 17m (18MHz) and 12m (24MHz bands). In addition as the upper limit of the international table of frequency allocations was moved from 10 GHz to around 300GHz, the IARU also sought additional allocations above 10 GHz and was successful in its endeavours as the conference allocated new bands to the amateurs at 24 GHz, 47 GHz, 75 GHz, 120 GHz, 143 GHz and 241 GHz.

Amateurs are privileged to have access to such a significant amount of spectrum. As we operate on our favourite band,

whether it is HF, VHF, UHF or micro-wave we should spare a thought for the past generations of IARU and member society officials, the fruits of whose labour we continue to benefit from, to this day.

It beholds this generation of amateurs to use these privileges wisely, look after them and pass them on to the future generations of amateurs.

The 60th and 80th anniversaries of the previous World Radio Conferences coming as they do before and after this year's World Radiocommunication Conference, should be a reminder to the current generation of amateurs to spare a thought for today's IARU officials who, on their behalf, have recently participated in this year's World Radiocommunication Conference (WRC-07) in Geneva.

The IARU, over the past few years, in preparation for the conference and promoting the amateur case, has undertaken a lot of work in lobbying the various regional telecommunications organisation, such as the CEPT.

Let us wish them well and hope that they are as successful in their endeavours with the various topics on the conference agenda, that are of interest to the amateur community, as their predecessor were 60 and 80 years ago.

AREN News

The AREN winter NETS will reconvene on the first and third Wednesday of each month for training purposes on 3.690Khz, with an alternative frequency of 7.099kHz at 2130Hrs local beginning 21st November.

This is a members only net. Non members may call in with reports at the end of the net when invited to do so by the Net Control Station.

Full details will be circulated to members in due course.

The AREN stand at the recent Waterford rally was well received.

The demonstration included APRS and Pactor 3.

One of the stations set up for the day was used to call into the IRTS 80m news.

AREN will also be represented at the upcoming Mayo Rally.

Your Letters

The Blasket Islands Radio-telephone in the 1940's

Tullamore.

Dear Editor,

In his fascinating book "Ireland in the 1950's, the Lost Generation", (Mercier Press 2004), Dr. Dermot Keogh, Prof. Of History at UCC makes reference to a 1947 Government report dealing with the transfer to the mainland of the Blasket Island community.

Section 17 of the report, dealing with communications, struck me as possibly an interesting piece of Irish radio history. It states:

"The Post Office on the island is connected with the P.O. at Dunquin by radio-telephone powered by batteries. Only 'Morse' messages may be sent and these only when the P.O. at Dunquin is open, viz. between 9am and 7pm. Dunquin P.O. is closed on Sundays. 24 hour telephone connection between Dunquin and Dingle is not at present in operation. The radio-telephone has been on the Great Blasket Island since the 19th of June 1941.

In 1947 the apparatus broke down on the following occasions.....

Here the report lists the occasions, some of them quite lengthy, on which the service was out of action. The report resumes: " This year (1948?) the apparatus was out of order from January 15th until February 15th. Because of the stormy weather, it was not possible to send a mechanic to the island. It is not possible to communicate with Dingle or Ballyferriter by radio-telephone, since the land-screen that lies between the island and those places reduces the power of the apparatus in such a way as to prevent messages reaching them. We understand from the Department of Post and Telegraphs that it would not be worthwhile to provide a standby apparatus on the island since a competent person would be required to effect the change over from one apparatus to another when necessary. We understand that it would be impossible to substitute the ordinary telephone for the radio telephone, because of the difficulty of laying a cable on the sea-floor between the island and the mainland."

Interesting. There was at the time apparently somebody on the island capable of operating an "apparatus" to send and receive CW and yet, it would seem, was judged incompetent to throw a switch which would bring an emergency radio on line!!!

Oh, those P & T boys, could you be up to them??? And what of those batteries?

Was there an island generator to charge them or had they to be hauled back and forward across the sound by 'naomhoga'?

One would love to know more. Perhaps some Echo Ireland reader can flesh out some of the skimpy details from this long-forgotten report.

John EI3JD

Squares Table 2007

Callsign	50 MHz	70 MHz	144 MHz	432 MHz	1296 MHz	Total
EI2IP	409	19	78	10	0	516
EI3IO	152	28	0	0	0	180
EI3GRB	114	0	0	0	0	114
EI2JD	53	0	4	0	0	57
EI3IX	26	1	4	2	1	34
EI7FAB	44	2	3	3	2	54
EI8IQ	0	0	22	0	0	22
EI7IQ	12	0	0	0	0	12
EI7IG	0	0	2	4	0	6
EI4GHB	0	1	1	1	2	5

This tables show the number of Maidenhead locator squares (e.g. IO63, IN88) worked by EI operators.

Contacts via repeaters or satellites do not count, and QSLs are not required

Updates to VHF Manager - joe_fadden@yahoo.com



Some of the attendance at the recent 60th birthday party held at Vienna Woods Hotel for Jim Barry EI8GS.

Seated: John EI6AK, Jim EI8GS, Hilary EI4IE

Back row: Tony EI2CV, Dave EI4BZ, John EI8IR, Jim EI3DP, Jerry EI6BT, Jeremy EI5GM, Michael EI8FG, Aedan EI3EG.

IRTS Contests 2008

80m Counties Contest	Tuesday January 1st 1200 - 1500utc	
2m Counties	Mon 24 March	1400 - 1600 local
CW Field Day	Sat/Sun 7/8 June	1500 - 1500utc
VHF/UHF Field Day	Sat/Sun 5/6 July	1400 - 1400
2m Counties	31 August 2008	1400 - 1600 local
SSB Field Day	Sat/Sun 6/7 September	1300 - 1300

Full rules at www.irts.ie/contests

Classes at South Dublin and Crossakiel.

We have a free course for the forthcoming Ham radio examination running in the Ballyroan Community Centre, Marian Rd, hosted by South Dublin Radio Club.

It is held between 2000 - 2200 pm on Tuesday evenings.

There will also be a course held in Crossakiel, Kells held on Wednesdays from 2030-2230, hosted by the newly founded CARA club (Crossakiel Amateur Radio Association).

Also anyone interested in radio will find a visit to the clubs enjoyable (same times). Call Michael EI2GKB on 0872481970 for details.

6 Metre SSB Net

A six metre net meets on the first Monday of each month on 50.135 SSB (horizontal polarisation) at 2100 (local).

Activity seems to be primarily in the Munster (south-west) area but all are welcome and encouraged to participate.

Frequency: 50.135 MHz

Mode: SSB

Date: First Monday monthly

The Tony Hancock TV programme "The Radio Ham" has been made available on the popular website YouTube, see

<http://www.southgatearc.org/news/june2007/hancock.htm>

Youth Mailing List

An International Youth Mailing list has been established by Duncan MacLachlan KUØDM.

The aim is to promote the hobby amongst Youth Operators worldwide and forging friendships in the process. The list is already growing in popularity with a healthy number of subscribers.

If you are under 25 years of age and would like to join, send an email to Jonathan 2I0JVI describing your interests and anything else you think relevant to mi3jvi@yahoo.co.uk.

Your details shall then be forwarded to Duncan.

We look forward to hearing from you!

Foyle and District Amateur Radio Club

Foyle & District ARC play host to GB75PW on the 15th of November, the special event station to commemorate the 75th anniversary of the Practical Wireless magazine.

The club has the added advantage of having the ranks of their operators joined by Rob Mannion, Editor of the magazine. Operation is expected to take place on a number of HF bands and also on 2 metres.

For more information visit the clubs web site on mn0aku.org.uk.

Fingal Radio Club

Fingal Radio Club held their AGM recently at their meeting rooms in Erin's Isle GAA complex in Finglas. A good attendance was had with a new committee duly voted in on the night.

The committee for 2007/2008 is as follows:

Chairman is Gerry Birkhead EI9DZ, Secretary is Aidan Murphy EI5HW, and Treasurer is Chris Yeates EI7AAB.

The outgoing treasurer Sean Linehan EI7CV was thanked for his sterling work throughout the year, and also for his culinary skills with his now infamous home-made Christmas cooking which formed the focal point for the clubs annual Christmas Dinner.

This year, the George Stritch Memorial Shield was awarded back to ALL members of the club, as opposed to any individual member.

Members Advertisements

Shack Clearance - For Sale:

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Phone EI7HS at 01-4923455

Members advertisements are printed free

AMSAT hope for geosynchronous satellite

Over the weekend of 26th-28th October, AMSAT-NA held a very successful Space Symposium in Pittsburgh, Pennsylvania.

AMSAT has recently been in consultation with Intelsat regarding a possible amateur payload on an Intelsat platform going into geosynchronous orbit.

The project, termed Phase IV Lite, is still in the early planning stages. However, AMSAT believes there is a good enough chance of getting a ride to geosynchronous orbit to make detailed work worthwhile.

Outline plans for the Phase IV Lite payload include similar transponders to those already under development for the Phase 3 satellites.

Accelerated development on the digital Advanced Communication Package is anticipated.

In addition to the communication payload flown to space, AMSAT plans to develop an earth station attainable by the average ham so that users can immediately take advantage of the audio, digital messaging, and video services.

AREN supports Charity walk

AREN members Declan Horan, EI9FVB and Conor O'Neill, EI4JN supported a walk in aid of the Irish Heart Foundation on Saturday 29 September last.

The walk in the McGillicuddy Reeks in County Kerry was led by Conor who radioed regular reports to Declan through the Cork repeater.

Declan operated from his home QTH in Ballicollig Co. Cork. The walkers encountered thick fog on the ascent, which later cleared, giving way to clear skies and spectacular views.



Reading the Mail

By

Michael McNamara, EI2CL

Welcome to compilation #48 of "Reading the Mail", an account of IRTS incoming QSL Bureau activity from 29 July to 30 September 2007.

As has been the position some time now, there is not a lot to report, but for the record, small packets (less than 1 kg) came from FMRE, G3LZQ, G3TXF, JARL and RCU.

Heavier lots came from RAAG, REF, and RSGB, (2kg each), RL and SRR (3.9 kg each), and the usual heavyweight from DARC (9.7kg).

Cards from the following were thought worthy of mention: A25/DL7CM, DL2JRM/BA1RB, DA0WAE, DA0UBOOT, DQ35AGCW, DQ50SAAR, DQ80IARU, DR06XVI, DR06SOCCER, DR35AGCW, DR50BUND, DR2007ANT, K200KJQ (1988 QSO), TP7CE, TT8JE, TY7Z, TY22DX, TZ3M, XU7DXX, 5A7A, 5H3EE, 5T5DV, 7Q7BP and 9G500.

For IOTA chasers, notables were FO/DL9AWI, HP/F5PAC, S92SV, JI1NJC/TF, TO7C, VK9AA, XF4IH, YJ0APY and 9N6/JA3EGZ.

Congratulations to all recipients.

With regard to the heavyweight from DARC, much of the contents consisted of cards from the Football World Cup 2006 special event stations in Germany.

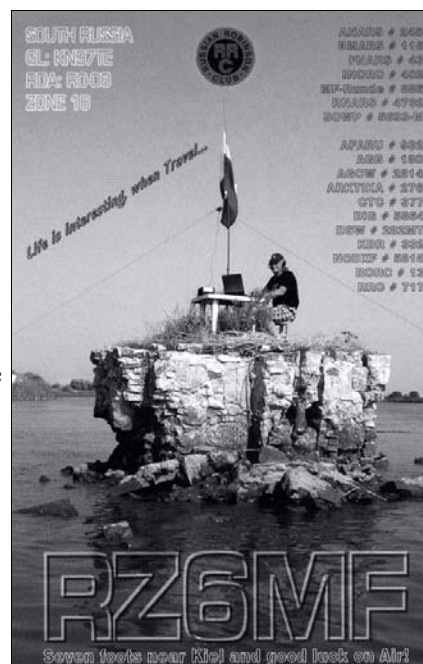
In case members are not already aware, please note that a QSL in return is not required; it says so on the cards!

Until my next report, all best wishes for Christmas and lots of nice DX in 2008.

Wszystkiego najlepszego z okazji Świąt Bożego Narodzenia i Nowego Roku!

Поздравляю с Рождеством и с новым годом, и желаю всего доброго в 2008 г!

Michael McNamara, EI2CL



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DR150 VHF	£140.00	€210.00
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